



US EPA RECORDS CENTER REGION 5

24901 NORTHWESTERN HWY · SOUTHFIELD, MI 48075 · (248) 358-5800 · FAX (248) 799-7192

January 20, 2012

Mr. Dan Dailey
MDEQ, Waste Management Division
Constitution Hall, Atrium Level
525 W. Allegan
PO Box 30241
Lansing, MI 48909

VIA: Email and USPS

RE: Permit Application

Detrex Corporation 12886 Eaton Ave. Detroit, MI 48227

EPA ID #: MID 091 605 972

Dear Mr. Dailey:

Enclosed please find one original and five copies of the engineering certification for our facility. I apologize for the delay but the document was misfiled with other paperwork and it was just recently discovered.

If you have any questions or need any other information please feel free to give me a call at 248.358.5800 ext. 131.

Best regards,

David Craig

Manager of Environmental and Safety Compliance

Change

Enclosure:

PE Certification

CC: file

C. McCausland - PCT

DEQ

FEB 1 6 2012

"I, Vicki R. Garon ______, inspected container storage areas 6, 7, 8, and 9 at Detrex Corporation's (Detrex) facility located at 12886 Eaton Avenue, Detroit, Michigan on December 14, 2010. Based on my inspection, the referenced container storage areas appear constructed in accordance with the approved plans and specifications shown in attachment D-1, D-3 (figures D-3.1, D-3.2, and D3.3) and E-2 in Detrex's August 2010 Hazardous Waste Management Facility Operating License Application (Application); are free of any cracks or gaps in the concrete; have been sealed (area 9), coated (areas 7 and 8), or are provided with intact secondary containment devices (area 6) to prevent migrations of liquids. Proper aisle spacing has been provided by painting lines on the floor in storage areas 7, 8 and 9. I have also reviewed the outside loading and unloading areas associated with Attachment E-5 and have found them to be in structurally sound condition.

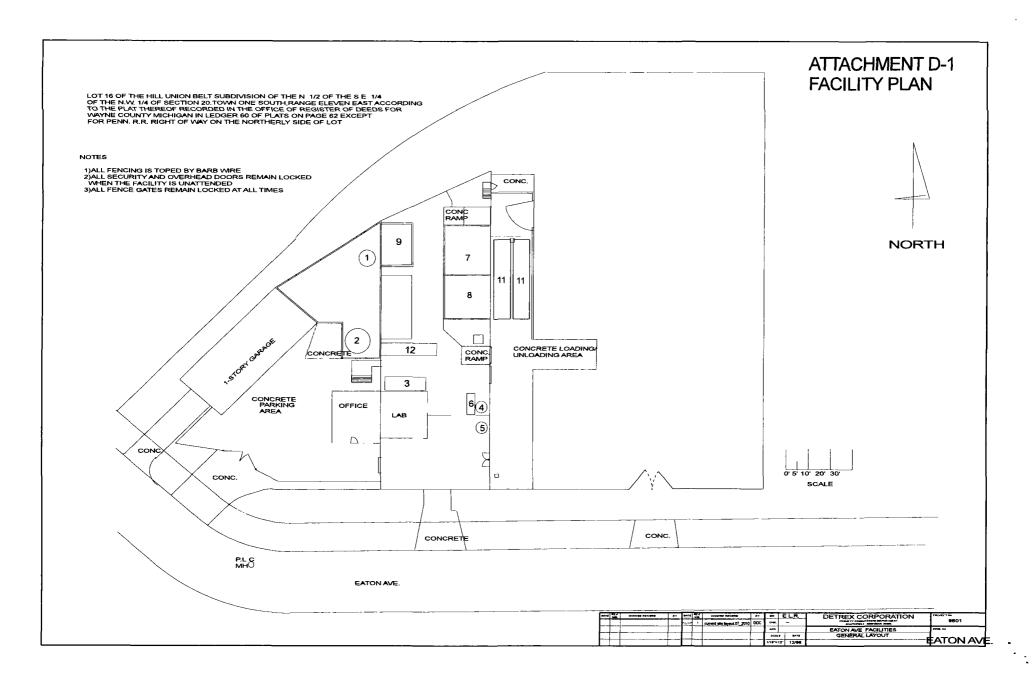
Based on my inspection of container storage areas 6, 7, 8, and 9, the loading and unloading areas, and associated documentation, I certify the Detrex facility is capable of storing hazardous waste containers in compliance with its operating license application and Part 111.

I certify under penalty of law that this document was prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Vicki R. Garon

Dated: August 19, 2011

Seal:



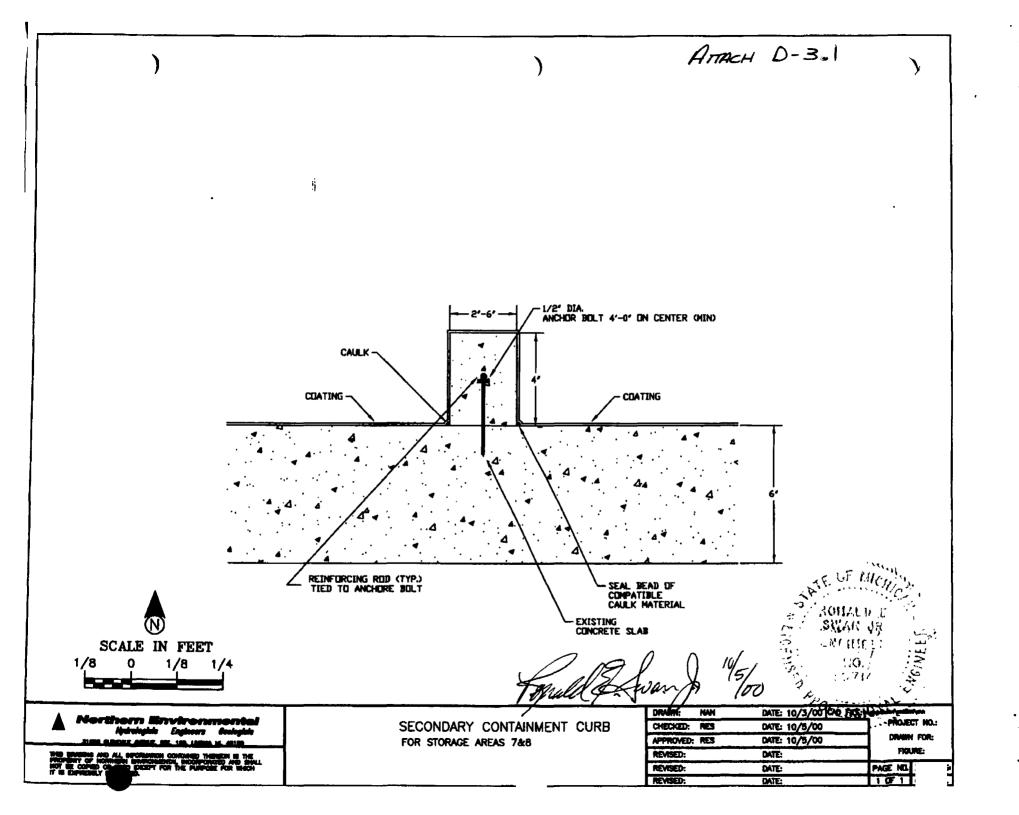
Date: Revision: 07.01.10 10-1

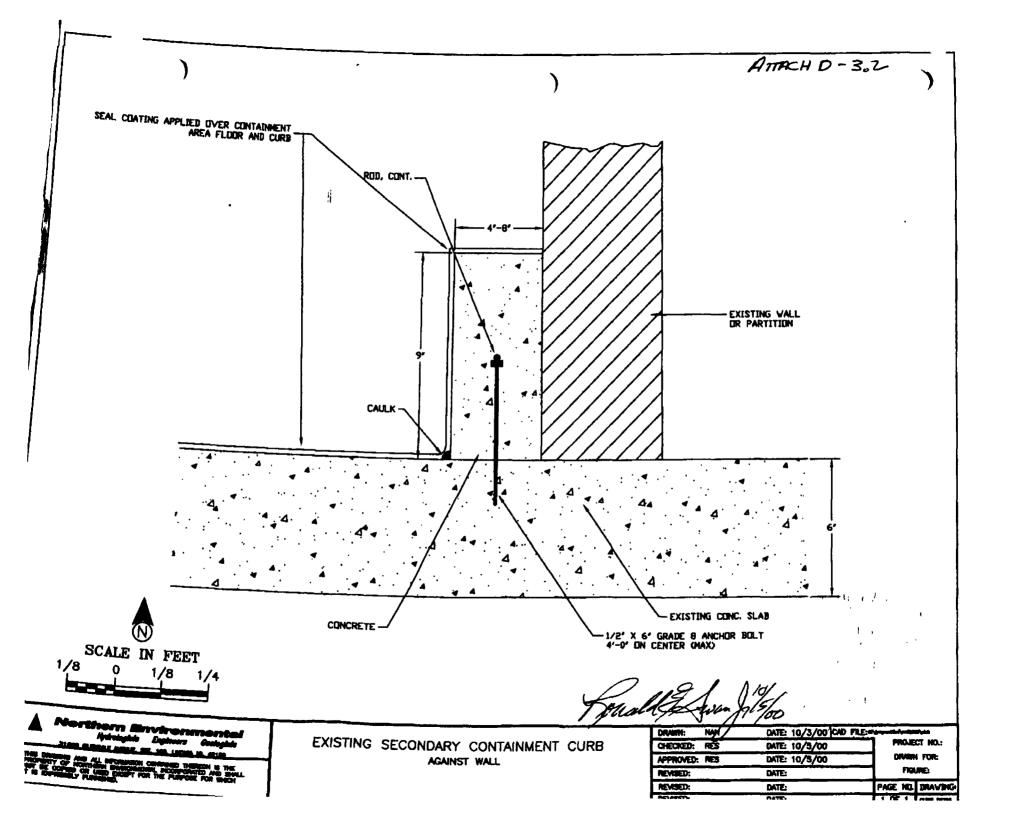
Page:

1

ATTACHMENT D-1 FACILITY LAYOUT

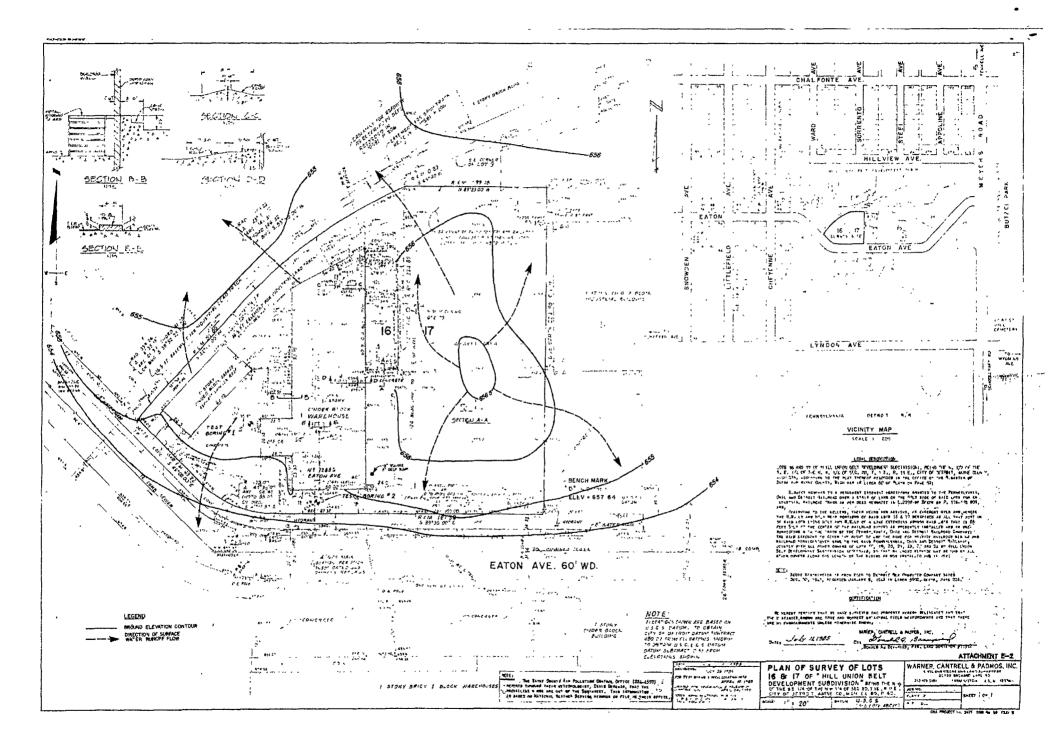
ID#	Equipment Name	Description
1	20,000 gal. Carbon steel Tank	Storage tank for Trichloroethylene
2	4,500 gal. Carbon Steel Tank	Storage tank for Trichloroethylene
3	5,000 gal. Carbon Steel Tank	Storage of Non-Hazardous Wastes.
4	3,000 gal. 316 stainless steel Tank	Storage of Non-Hazardous Wastes.
5	2,500 gal. 316 Stainless Steel Tank	Storage of Non-Hazardous Wastes
6	Staging area	Sampling (containers weighed as needed)
7-9	Interior Hazardous Waste Storage	Active
11	Exterior Hazardous Waste Storage	Storage of Flammables
12.	Drum Filling Station	Product Drumming Station.





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STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



November 13, 2002

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111 RECEIVED

NOV 1 4 2002

Technical Support and Permits Section
Waste Management Branch
Waste, Pesticides and Toxics Division
U.S. EPA - Region 5

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation (Detrex), Detroit, MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste and Hazardous Materials Division (WHMD), has reviewed your October 21, 2002 letter to Ms. Ronda Blayer, requesting modification of Detrex's January 31, 2001 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The request addressed a change in the facility manager. Based on a review of the modification request, the current operating license, and the administrative rules promulgated pursuant to Part 111, the WHMD hereby approves the requested modification.

In accordance with R 299.9519(6)(b) of Part 111, Detrex is required to send a notice of the minor modification to all persons on the facility mailing list that was previously provided to you and to all appropriate units of state and local government. Such notice must be provided within 90 calendar days after the changes are put into effect.

If you have any questions, please contact Ms. Blayer at 517-373-9548 or you may contact me.

Sincerely.

George W Bruchmann, Chief

Waste and Hazardous Materials Division

517-373-9523

cc: Mr. Nabil Fayeumi, United States Environmental Protection Agency

Mr. Steve Buda, MDEQ/Operating License File

Ms. Ronda L. Blayer, MDEQ

Mr. John McCabe, MDEQ

Ms. Jeanette Noechel, MDEQ

Mr. Ron Stone, MDEQ



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



September 30, 2002

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation (Detrex), Detroit, MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste and Hazardous Materials Division (WHMD), has reviewed your June 14, 2002 letter to Ms. Ronda Blayer, requesting modification of the above referenced facility's January 31, 2001 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The request addressed a change in the facility manager and emergency coordinator. Based on a review of the modification request, the current operating license, and the administrative rules promulgated pursuant to Part 111, the WHMD hereby approves the requested modification.

In accordance with R 299.9519(6)(b) of Part 111, Detrex is required to send a notice of the minor modification to all persons on the facility mailing list that was previously provided to you, and to all appropriate units of state and local government. Such notice must be provided within 90 calendar days after the changes are put into effect.

If you have any questions, please contact Ms. Blayer, at 517-373-9548, or you may contact me.

Sincerely,

Roger Przybysz, Acting Chief

Waste and Hazardous Materials Division

517-373-9523

cc: Man Nebil Egypumi, United States Environmental Protection Agency

Mr. Steve Buda, MDEQ/Operating License File

Ms. Ronda L. Blayer, MDEQ

Mr. John McCabe, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

REPLY TO

WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www deq.state.mi.us
RUSSELL J. HARDING, Director

September 27, 2001

<u>) MAIL</u> ₹ECEIPT REQUESTED

Craig, CHMM, CET
of Environmental and Safety Compliance
urporation
. . . . Box 5111
Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Notice of Deficiency (NOD) for Resource Conservation and Recovery Act (RCRA)

Facility Investigation (RFI) Work Plan for

Detrex Corporation (Detrex), Detroit; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has reviewed your August 7, 2001 RFI Work Plan (Plan) submittal for the above referenced facility. Submittal of the Plan is required pursuant to Conditions IV.E.1 and M of the referenced facility's January 31, 2001 hazardous waste management facility operating license, which was issued pursu to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

Upon reviewing the Plan, the WMD reached the conclusion that it is not an actual work plan, since actual work is proposed, but rather is a document of current conditions at the facility. The Plan v reviewed as such. Based on a review of the Plan, the operating license, and Part 111 and the administrative rules promulgated pursuant thereto, the WMD has determined that the Plan is de A list of the deficiencies is provided below.

Plan Deficiencies

- 1. As a point of clarification, the Plan should be revised to indicate that the primary loading/unloading dock cannot be used for the storage or staging of hazardous waste neither can the secondary loading/unloading area. Refer to Page 5 of the Plan for ar
- As an additional point of clarification, the Plan should be revised to state that hazarr will be able to be stored in waste management units (WMUs) 1-3 (container storagronce the required construction certification documentation is reviewed and approve WMD. At this time, only WMUs 4-7 (container storage areas 11 and 29-31) are at the storage of hazardous wastes. Refer to page 8 of the Plan for an example.

- Throughout the Plan, there are references to numbered attachments are lettered, not numbered. Additionally, the majority inaccurate in that they refer to an attachment that does not contain to the numbering/lettering format used when referring to the attachment all of the attachment references checked and corrected where necessary information provided in each of the attachments. Refer to Page 8 of the PR
- Additional information is necessary in order for the WMD to accept the analytic. May 23, 2001 soil sampling event. The work plan for this sampling event, included assurance/quality control plan and sampling standard operating procedures (SOPs provided in an attachment to the Plan. Information that must be included in the work the sampling event includes, but is not limited to, the basis for selection of sampling loc (both horizontal and vertical), sampling methodology (reliability and discrete sample colleand all field notes. Refer, in part, to Pages 10 and 20 of the Plan.

Please be advised that the WMD has reviewed information pertaining to the original RFI work plan and report for the August 26, 1994 soil sampling event that was submitted to the United States Environmental Protection Agency (U.S. EPA) in conjunction with the facility's 1992 federal Hazardous and Solid Waste Amendments Permit. Based on this review, the WMD has concluded that it can accept the analytical data from this event for the purposes of characterizing the nature and extent of soil contamination with halogenated solvents at the facility.

- 5. Under "Rationale for Sampling," the Plan suggests that the objective of soil sampling is to verify the metals content in the fill area. However, the primary concern to date has been contamination associated with constituents other than metals. This can be seen by examining the nature of the data collected to date. The Plan must be revised accordingly to correct this inaccuracy. Refer, in part, to Pages 11 and 22 of the Plan.
- The Plan does not appear to contain the boring logs and photoionization detector data referenced in the Plan. This information must be included in the Plan. Refer to Page 11 of the Plan.

The purpose and applicability of the schedule contained in the Plan is not clear. As is outlined in this NOD, substantial revision of the Plan is necessary, as is the need to collect and analyze additional investigative data. That being said, the purpose of the schedule must be clearly 'ated in the Plan and the schedule revised to more accurately reflect the remaining work to be 'mpleted. Refer to Page 12 of the Plan.

e information regarding the RFI Project Management Team is not provided in the Plan and st be included. Refer to Page 12 of the Plan.

the analytical data collected by Detrex, and accepted by the WMD, must be used to attempt the sate the relevancy of the various environmental pathways and compliance with the able cleanup criteria established under Part 201, Environmental Remediation, of Act 451, opted by reference in R 299.9629. The Plan must include justification should Detrex in that any of the environmental pathways are not relevant or any of the criteria are not ale. A summary of the criteria comparison, including both summary tables (including cation, boring depth, sample identification, parameter, analytical result, and various nd a graphical summary, must be included in the Plan. Refer, in part, to Pages 1!

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- 10. It appears that Detrex wishes to eliminate the groundwater pathway and the associated cleanup criteria from consideration at the facility. This would require a Groundwater Not In An Aquifer (GWNIAA) determination. Detrex must formally request such a determination as part of the Plan and submit the necessary justification information as noted in Deficiency 9 above. A copy of the WMD's GWNIAA guidance document is enclosed for your use in preparing the appropriate information and request. Refer to Page 15 of the Plan for example.
- 11. Additional data beyond that collected at the May 23, 2001 sampling event is necessary to accurately characterize the nature and extent of the contamination at the facility. Given the high concentrations of halogenated compounds in the soils near the facility boundary (particularly those at soil borings SB-1, SB-15, SB-16, and SB-17) and the porous nature of the fill material, investigation of the possible migration of contaminants off-site is warranted. Refer to Page 15 and Attachment H/8 of the Plan for example.
- 12. The Plan does not mention the possibility of soil contamination beneath the building and how such contamination would be addressed. Given the exceedances of the soil volatilization to indoor air inhalation criteria (SVIIC) in the soils around the building (e.g., soil boring SB-13), this pathway needs to be further investigated. Refer, in part, to Page 17 of the Plan.
- 13. The first bullet item at the bottom of Page 22 should be revised to refer to the "generic industrial cleanup criteria" not the "generic cleanup criteria."
- 14. Please be advised that given the lack of sufficient definition of the nature and extent of the contamination at the facility, an adequate pathways analysis, and an evaluation of compliance with the applicable cleanup criteria, it is premature to limit the focus of the possible facility restrictions to the areas surrounding soil borings 15 and 17. Refer to page 23 of the Plan
- 15. Based on Attachment 8 of the facility's operating license, the Plan must be revised by changing U 121 to trichlorofluoromethane and including the appropriate entry for U 161 in Attachment B/2 of the Plan.

Response to NOD

An itemized response to this NOD, along with revised RFI work plan correcting the deficiencies, must be submitted to the Chief of the WMD within 30 days after receipt of the NOD as outlined in Conditions IV.E.2 and M of the operating license. Please note the revision date on each page of the revised RFI work plan. Five copies of the revised RFI work plan must be submitted.

Follow-Up Meeting

The WMD strongly recommends that a meeting be set up between Detrex and the WMD to discuss these deficiencies, and the overall RFI process and schedule. Please contact me once you receive this letter to set up the meeting. Following the meeting, Detrex should have the information it needs to prepare a complete summary of current conditions at the facility by addressing the above noted deficiencies and then prepare an acceptable RFI work plan to address data gaps identified in the summary of current conditions.

If you have any questions, please contact me.

Sincerely,

Ronda L. Blayer
Ronda L. Blayer

Environmental Engineering Specialist

Waste Management Division

517-373-9548

Enclosure

cc: Mr. Nabil Fayoumi, U.S. EPA

Mr. Steve Buda, MDEQ Mr. John McCabe, MDEQ Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Corrective Action File

STATE OF MICHIGAN



JOHN ENGLER, Governor DEPARTMENT OF ENVIRONMENTAL QUAI

"Better Service for a Better Environment" HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www.deq.state mi us RUSSELL J. HARDING, Director

September 18, 2001



WASTE MANAGEMENT BRANCH Waste, Pesticides & Toxics Division U.S. EPA — REGION 5

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Operating License Minor Modification and Schedule of Compliance

Detrex Corporation (Detrex), Detroit: MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has reviewed your August 27, 2001 request for a minor modification to the above referenced facility's January 31, 2001 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The request addressed the physical design of container storage areas 7 and 8, and the limitation of storage of certain waste types and the waste analysis plan.

Based on a review of the modification request, the operating license, and the administrative rules promulgated pursuant to Part 111, Detrex is hereby advised that the WMD cannot process the request at this time.

Design of Container Storages Areas 7 and 8

Condition V.A.1 of the operating license requires that storage areas 7 and 8 be constructed in accordance with the referenced specifications. The modification request indicates that three main alterations have been made to the referenced specifications for these areas. Specifically, the interior curb height has been increased five and one-half inches (thereby providing additional secondary containment volume), the permanent access ramps have been deleted from the design, and a different chemical resistant coating has been applied to the secondary containment systems. While these alterations appear to be acceptable, the WMD cannot process the modification request until the additional modifications required by Condition V.A.4 of the operating license are made and the certifications (both construction and operational ability) required by Conditions V.A.4 and 5 are provided. As-built drawings of the areas, including Attachment D-3B, must accompany the certifications. The as-built drawings must be signed and sealed by a registered professional engineer. Revised figures must also be provided to the extent that the alteration of the proposed design impacts other figures in the operating license. Also, specific information (drawings, specifications, etc.) regarding access to areas 7 and 8, in lieu of the permanent ramps that were not constructed, must be provided.

Limitation of Storage of Certain Waste Types and the Waste Analysis Plan

Based on manufacturer and analytical information concerning the chemical resistant coating applied to container storage areas 7 and 8, Detrex has expressed the need to preclude the storage of methylen chloride and concentrated sulfuric acid above 80 percent from these container storage areas. The WMD supports such a limitation. However, the waste analysis plan must clearly provide for the collection of this information in both the waste characterization (generator provided information) and waste screening (facility fingerprinting) processes. Detrex must provide specific information as to how the current waste analysis plan provides for the collection of such information or provide revisions to the waste analysis plan to ensure the information is collected.

Container Storage Areas 9 and 29

Conditions V.B. 1 and 2 require the application of a chemical resistant coating to the secondary containment systems for both container storage areas 9 and 29, and the painting and maintenance of lines on the floor around the perimeter of each area and lines on the floor denoting the center of each row of containers in area 9. Assuming that the same chemical resistant coating is used in areas 9 and 29 that was used in areas 7 and 8, the limitation on the storage of methylene chloride waste and concentrated sulfurio acid about 80 percent wastes would also apply to areas 9 and 29.

All of these upgrades must be certified and the certification submitted to the WMD.

Processing of the Operating License Modification Request

Once all of the modifications, upgrades, and revisions noted above have been made and the necessary information provided to the WMD, the WMD will field verify the facility conditions. Then, the WMD will be able to process Detrex's operating license modification request.

Submittal Time Period

Detrex has far exceeded the time periods outlined in the schedule of compliance contained in Part V of the operating license, particularly for submittal of the certification information outlined in Conditions V.A.4 and 5 and B.1 and 2. The certification information and other information requested above must be submitted to the WMD within 30 days of receipt of this letter.

Failure to adhere to the submittal time period outlined above may result in enforcement action.

If you have any questions, please contact me.

Sincerely, Ronda L. Blayer

Ronda L. Blayer

Environmental Engineering Specialist

Waste Management Division

517-373-9548

cc:

Mr. Steve Buda, MDEQ

Mr. John McCabe/Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File





P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

June 29, 2001

Mr. Hak Cho US EPA Region 5 (DRP-8J) 77 W. Jackson Blvd Chicago, IL 60604-3590

RE:

Detrex Corporation

Detroit Facility

EPA ID # MID 091 605 972

Modification to Operating License

Dear Mr. Cho:

In accordance with R 2999519(6)(b) of Part 111 administrative rules, Detrex is providing notice of a minor modifications made to our Facility's Waste Analysis Plan (WAP) and Contingency Plan. These changes were made necessary to address personnel changes and to simplify documents used to gather information from customers.

If you should have any questions regarding these changes, please feel free to give me a call.

Sincerely,

David Craig, CHMM, CIST

Manager of Environmental and Safety Compliance

CC:

File

Facility

STATE OF MICHIGAN



JOHN ENGLER, Governor

REPLY TO

WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: www deq state mi.us RUSSELL J. HARDING, Director

June 12, 2001

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation, Detroit, MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has reviewed your May 22, 2001 letter to Ms. Ronda Blayer, requesting modification of the above referenced facility's January 31, 2001 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The request addressed the waste analysis plan, emergency coordinator, and Resource Conservation and Recovery Act (RCRA) Facility Work Plan. Based on a review of the modification request, the current operating license, the administrative rules promulgated pursuant to Part 111, and discussions with WMD district staff, the WMD hereby approves the requested modifications.

Copies of the modified pages of the operating license, as approved by the WMD, are enclosed. These pages include: pages 17 and 22 of the operating license, the Generator Waste Material Profile Sheet from Attachment C-4 of Attachment 1, Waste Analysis Plan of the operating license, and Attachment G-1 of Attachment 4, Contingency Plan of the operating license. Please be sure that the appropriate pages of your operating license are replaced accordingly. In accordance with R 299.9519(6)(b) of Part 111, the Detrex Corporation is required to send a notice of the minor modifications to all persons on the facility mailing list and the appropriate units of state and local government. A copy of the facility mailing list is enclosed for your use. Such notice must be provided within 90 calendar days after the changes are put into effect.

If you have any questions, please contact Ms. Blayer, at 517-373-9548, or you may contact me.

Jim Sygo, Chief
Waste Management Division
517-373-9523

Enclosures

cc: Mr. Steve Buda, MDEQ

cc/enc: Attachit Fayer in United States Environmental Protection Agency

Ms. Ronda L. Blayer, MDEQ Mr. John McCabe, MDEQ Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File

any interim measures. {R 299.9521(3)(a)}

TEMPORARY UNITS

The licensee shall comply with the requirements of R 299.9636 in order to designate tank or container storage units used for the treatment or storage of remediation wastes as temporary units for implementation of corrective measures, including any interim measures. {R 299.9521(3)(a)}

M. SUMMARY OF CORRECTIVE ACTION SUBMITTALS

The licensee shall submit required corrective action documents in accordance with the schedule below.

CORRECTIVE ACTION DOCUMENT	SUBMITTAL DEADLINE
Written notification of a new release of a contaminant from an existing WMU, a new WMU, or a release of a contaminant from a new WMU	Within 30 days after discovery
RFI Work Plan for a newly identified release of a contaminant from an existing WMU, a new WMU, or a release of a contaminant from a new WMU	Within 60 days after receipt of written notification that corrective action is required
RFI Work Plan for existing WMUs and contaminant releases	Within 180 days after the effective date of this license
Revised RFI Work Plan for existing WMUs and contaminant releases	Within 30 days after receipt of RFI Work Plan Notice of Deficiency
RFI progress reports	Within 30 days after initiation of the RFI and every 90 days thereafter
RFI Final Report for existing WMUs and contaminant releases	Within 60 days after completion of RFI
Revised RFI Final Report for existing WMUs and contaminant releases	Within 30 days after receipt of RFI Final Report Notice of Deficiency
CMS Work Plan for existing WMUs and contaminant releases	Within 60 days after receipt of notification that CMS is required
Revised CMS Work Plan for existing WMUs and contaminant releases	Within 30 days after receipt of CMS Work Plan Notice of Deficiency
CMS progress reports	Within 30 days after initiation of the CMS and every 90 days thereafter
CMS Final Report for existing WMUs and contaminant releases	Within 60 days after completion of the CMS
Revised CMS Final Report for existing WMUs and contaminant releases	Within 30 days after receipt of CMS Final Report Notice of Deficiency

GENERATOR WASTE MATERIAL PROFILE SHEET **DETREX CORPORATION**

Solvents and Environmental Services Division Profile #: _____ Date: _____ SECTION I GENERATOR INFORMATION Generator Name: _____ Facility Address: _____ City, ST, Zip: ____ Contact(s): ___ Telephone & Fax: S.I.C. Code(s): EPA ID#: Generator Status: CESQG SQG LQG SECTION II SAMPLING INFORMATION Location of Container:

inside heated unheated outside w/o covered roof outside w/ roof Type of Sampling Device: _____ Sampled by (PRINT CLEARLY): ____ Method of sampling: ☐ Grab ☐ Composite (# of Containers) ____ Was Sampling device clean: ☐ yes ☐ no SECTION III WASTE FINGERPRINT 1. Physical Characteristic of Waste at 70°F: \Box Solid \Box Liquid \Box Layers $\underline{\hspace{1cm}}$ \Box pumpable \Box free liquids (method 9095) 2. Characteristic odor of waste:

none Description of odor _____ 3. Color of Waste: 4. Density (include units): _____ Specific Gravity: _ 5. pH range (method 9040 or 9045): $\square < 2$ $\square > 2-4.9$ $\square 5-9.9$ $\square 10 - < 12.5$ $\square > 12.5$ $\square N/A$ (non-aqueous material) 6. Flash Pt.: $\Box < 73^{\circ}F \ \Box 73^{\circ}F - < 140^{\circ}F \ \Box > 140^{\circ}F - < 200^{\circ}F \ \Box > 200^{\circ}F$ 7. Initial Boiling Point (for flammable liquids: method 1010): $\leq 95^{\circ}F$ \square Yes \square No SECTION IV HAZARDOUS WASTE CHARACTERISTICS & PROCESS GENERATING WASTE Facility Common Waste Name: 2. Provide a DETAILED DESCRIPTION of the process generating the waste. Provide a flow diagram if necessary to provide additional details on process: Source Code: A 3. Based on lab analysis and/or 'generator knowledge' of the process(es) generating the wastes, describe composition: Constituent and Approximate Concentration RANGE 4. List any and all hazardous waste codes (FKDUP), including applicable state hazardous or special waste codes: Form Code: B Characteristic Codes need to be added if concentrations exceed regulatory action levels based on testing of the waste stream (attach lab results) or if you have knowledge that the constituent may exist. For constituents that the waste stream has come in contact with, particularly metals, it is reasonable to consider that the constituent may be present. IN ORDER TO USE GENERATOR KNOWLEDGE, YOU MUST HAVE DEFENSIBLE PROOF OF THE NONEXISTANCE / EXISTANCE OF A PARTICULAR CONSTITUENT. INCLUDE ALL AVAILABLE DOCUMENTATION WITH THIS PROFILE.

GENERATOR WASTE MATERIAL PROFILE SHEET DETREX CORPORATION

Solvents and Environmental Services Division

Profile #: Waste Stream approval #: ______ Date: _____ SECTION V ADDITIONAL INFORMATION 1. Is this material Water Reactive □ yes □ no 2. Is this material Pyrophoric (4.2) □ yes □ no 3. Is this material Explosive (1) □ ves □ no 4. Is this material Shock Sensitive □ ves □ no □ yes □ no 5. Is this material Auto-ignitable 6. Is this material Radioactive (7) □ yes □ no 7. Is this material a Biological/infectious waste (6.2) □ ves □ no 8. Does this material contain PCBs □ yes □ no 9. Does this material contain Asbestos □ ves □ no 10. Does this material contain reactive cyanides (above 250 ppm) amenable to chlorination? □ ves □ no 11. Does this material contain reactive sulfide above 500 ppm? □ ves □ no 12 Is this HW a dioxin/furan waste as specified in 40 CFR 261.31 □ ves □ no If the any of the above boxes are checked yes, contact Detrex Corporation regarding acceptance 13. Is this material an Oxidizer (D001) □ yes \square no 14. Estimate the following: 15. At the point of generation, the VOCs in this HW were less than 500-ppmw □ NA □ ves 16. This HW has been treated such that the VOC concentration is currently below 500-ppmw □ yes □ no SECTION VI SHIPPING AND HANDLING INFORMATION 2. Shipment frequency: ☐ single shipment ☐ monthly ☐ annual anticipated volume: 3. USDOT: Proper DOT shipping name: HC _____ UN/NA# ____ PG ____ ERG#
4. EPA Reactivity Group number(s) _____ SECTION VII CERTIFICATIONS I hereby certify that all information (including attached information) is complete and factual, and is an accurate representation of the known and suspected hazards pertaining to the waste described herein. All relevant knowledge regarding the waste has been disclosed to Detrex Corporation. I hereby authorize Detrex personnel to add supplemental information to this profile regarding this waste stream. I also authorized Detrex Corporation to make necessary changes regarding the characterization of this waste, provided I am contacted to give 'verbal' permission. I authorize Detrex to obtain a sample from any waste shipment for purposes of verification and confirmation. Generator's Signature: Print Name: Title: ____ NOTE: Detrex Corporation can provide you with supplemental information sheets listing characteristic HW codes and the Universal Treatment Standards (UTS) along with the corresponding regulatory action levels. Facility Approval Signature:

PS 2001-1 Page 2

Date: 05/21/01 Revision: 01-1

ATTACHMENT G-1 EMERGENCY COORDINATORS

NAME	JOB TITLE	WORK PHONE	HOME PHONE	HOME ADDRESS
Primary Dick Godette	District Manager Central division	(313) 491-4550	(734) 285-4683	2218 23 RD Street Wyandotte MI 48192
Alternate(s)				
Jim Goodrich	Waste Coordinator	(313) 491-4550	(248) 628-0321	3904 Ludwig Rd. Oxford MI 48317

CONSERVATION & ENVIRONMENT COMMITTEE HOUSE OF REP PO BOX 30014 LANSING MI 48909-7514 MI DEPT OF ENVIRONMENTAL QUALITY DRINKING WATER AND RADIOLOGICAL PROTECTION DIV LANSING ID CHIEF
DEQ
AIR QUALITY DIVISION
ID MAIL
LANSING MI ID

MR HAK CHO U.S. EPA REGION 5 (DRP-8J) 77 W JACKSON BLVD CHICAGO IL 60604-3590 SANDRA S CLARK, DIRECTOR DEPT OF STATE/BUR OF HISTORY 717 W ALLEGAN STREET LANSING MI 48918-1800 DAVID CRAIG DETREX CORPORATION 24901 NORTHWESTERN HIGHWAY SOUTHFIELD MI 48075

JEFF DAUPHIN, PRESIDENT MICHIGAN WASTE REPORT WASTE INFORMATION/MGMT SRVCES 818 AVENUE D TRAVERSE CITY MI 49686-3532 CHARLES E DOTSON
THE TRAVERSE GROUP-MANAGER
BUSINESS DEVELOPMENT
400 MONROE, SUITE 410
DETROIT MI 48226

JIM EKDAHT, UPPER PENINSULA FIELD DEPUTY DNR-MARQUETTE DISTRICT OFFICE 1990 US HIGHWAY 41 S MARQUETTE MI 49855-9198

MICHAEL A FIGLIOMENI MCCURDY & WOTILA PROF. CORP. 120 WEST HARRIS STREET CADILLAC MI 49601 GEORGE GAINES
DETROIT DEPT OF HEALTH
1151 TAYLOR STREET
DETROIT MI 48202

KATHERINE HAMMERS HONIGMAN MILLER ET AL 2290 FIRST NATIONAL BLDG 660 WOODWARD AVE DETROIT MI 48226

RUSSELL HARDING, DIRECTOR DEQ ENVIRONMENTAL PROTECTION LANSING MI ID JAMES HENDERSON DEQ-EAD TOWNE CENTER 2ND FLOOR ID MAIL MI DAVE LOBBESTAEL DYNECOL INC 6520 GEORGIA ST DETROIT MI 48211

GREGORY A MOORE CITY OF DETROIT 660 WOODWARD AVENUE SUITE 1590 DETROIT MI 48226 ARTHUR R NASH JR
DEQ, EXECUTIVE OFFICE
DEPUTY DIRECTOR
ID MAIL
LANSING MI ID

NATURAL RESOURCES & ENV AFFAIRS COMMITTEE SENATE/RM 806 BSF PO BOX 30036 LANSING MI 48909-7536

DR BEN OKWUMABUA DEQ WASTE MANAGEMENT DIV LIVONIA DISTRICT OFFICE 38980 SEVEN MILE ROAD LIVONIA MI 48152 JOSEPH M POLITO HONIGMAN MILLER ET AL 2290 FIRST NATL BLDG 660 WOODWARD AVE DETROIT MI 48226-3583 GARY ROBERTSON 8436 STOUT WARREN MI 48093

ROY SCHRAMECK DEQ - SWQD LIVONIA DISTRICT OFC 38930 SEVEN MILE RD LIVONIA MI 48152 KEN SILFVEN
DEQ PRESS SECRETARY
OFC OF EXEC ASSISTANCE
ID

TIMOTHY R SOWTON DEQ, EXECUTIVE DIV LEGISLATIVE LIAISON LANSING ID

REP. EDWARD VAUGHN HOUSE OF REPRESENTATIVES MAILROOM ID SENATOR JACKIE VAUGHN, III SENATE MAILROOM ID WAYNE E WILHELMI BOHN ENGINE & FOUNDRY DIV 1310 KALAMAZOO STREET SOUTH HAVEN MI 49090

ANDR" AJAC

DE AGE TANK DIVISION

TOW. JUNTER

ID - TECHNICAL REVIEW UNIT

LANSING MI



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 2 2 2001

REPLY TO THE ATTENTION OF:

DW-8J

RE: Detrex Corporation Detroit, Michigan MID 091 605 972

Dear Sir/Madam:

On March 22, 2001 , the United States Environmental Protection Agency (U.S. EPA), Region 5, issued the Federal portion of a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit for the above-referenced facility. When both this portion of the permit and the State of Michigan's portion of the permit are effective, Detrex Corporation has an effective RCRA permit.

This letter supplements the enclosed Response to Comments generated as a result of the public notice for the draft permit. This Response to Comments was prepared by the U.S. EPA and sent to interested parties.

I have made the final decision to issue the Federal portion of the RCRA Hazardous Waste Permit for Detrex Corporation in Detroit, Michigan. Unless review is requested under Title 40 of the Code of Federal Regulations (40 CFR) Section 124.19, the Federal portion of the RCRA permit becomes effective on March 22, 2001.

This permit is effective on the date indicated on the signature page of the permit. Eligibility to appeal this permit is discussed further in 40 CFR 124.19. The original and one copy of the petition must be received by the U.S. EPA in Washington, D.C. at the address indicated below within 30 days of the date of this letter.

Environmental Appeals Board (MC-110 3H) United States Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

A copy of the petition should also be sent to:

Waste Management Branch (DW-8J) U.S. EPA Region 5 77 West Jackson Boulevard Chicago, Illinois 60604 The procedures for filing an appeal are found in 40 CFR 124.19. The administrative appeal procedures must be completed prior to any action seeking judicial review.

On behalf of the U.S. EPA, I wish to thank you for your interest in the final permit conditions for the Detrex Corporation in Detroit, Michigan.

Sincerely,

Robert Springer, Director

Waste, Pesticides and Toxics Division

Enclosure

Detrex Corporation MID 091 605 972

Nabil Fayoumi Fe

Sir/Madam Letter February 22, 2001

waste management branch 3/19/0

secretary B 2/21/81	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
TYPIST/ AUTHOR	Corrective Action SECTION CHIEF	Permitting SECTION CHIEF	POL.PREV.& SPEC.INTIV SEC. CHIEF	WMB BRANCH CHIEF	WPTD DIVISION DIRECTOR
NF 2/22/01		3/1/01		450 101 2/v1/01	3/22/01

76J 3/12/01 STATE OF MICHIGAN



JOHN ENGLER, Governor DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION

REPLY TO

PO BOX 30241 LANSING MI 48909-7741

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www.deq state.mi.us RUSSELL J. HARDING, Director

January 31, 2001

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Hazardous Waste Storage Facility Operating License Detrex Corporation, Detroit, Michigan; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division, has issued Detrex Corporation's hazardous waste storage facility operating license for the above referenced facility.

The operating license application review and public participation procedures were conducted in accordance with Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and its Administrative Rules. The Operating License is based on this review and the results of the December 4, 2000 public hearing and the public comment period held between November 1, 2000 and December 19, 2000. A copy of the Operating License, Notice of Final Decision, and Responsiveness Summary are enclosed.

If you have any questions, please contact Ms. Ronda L. Blayer of the Hazardous Waste Program Section, at 517-373-9548, or you may contact me.

Incerély

Jim Sygo, Chief

Waste Management Division

17-373-9523

Enclosures

cc: Senator Jackie Vaughn III

Representative Irma Clark

Mr. Russell J. Harding, Director, MDEQ

Mr. Arthur R. Nash Jr., Deputy Director, MDEQ

Mr. Timothy R. Sowton, Legislative Liaison, MDEQ

Mr. Kenneth Burda, MDEQ

Mr. Steve Buda, MDEQ

cc/enc: Ms. Harriet Croke/Mr. Nabil Fayoumi, U.S. Environmental Protection Agency

Ms. Ronda L. Blayer, MDEQ

Dr. Ben Okwumabua, MDEQ - Southeast Michigan

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File

DECEIVED

MNOF PERMIT SECTION - WMB Waste, Pesticides & Toxics Division U.S. EPA - REGION 5

RESPONSIVENESS SUMMARY

Detrex Corporation
Hazardous Waste Storage Facility
MID 091 605 972

Operating License and Federal Resource Conservation and Recovery Act (RCRA) Permit

January 31, 2001

On December 4, 2000, a public hearing was held to receive comments on the draft operating license and the draft federal permit to be issued to Detrex Corporation (Detrex) pursuant to Part 111, Hazardous Waste Management, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and 1976 42 U.S.C 6901, as amended, the RCRA. The federal permit regulates facility activities over which the state does not yet have regulatory authority. These activities include compliance with land disposal restrictions and air emission standards for containers.

The public hearing and public comment period were announced in the <u>Metro Times</u> and on Detroit radio station WWJ News Radio 950. The public comment period extended from November 1, 2000 to December 19, 2000. The Michigan Department of Environmental Quality (Department) publishes a bi-weekly "Calendar" that provides public notice of pending departmental decisions. Notices regarding the public hearing and the Department's intent to issue a Part 111 operating license to Detrex appeared in the Calendar on November 20, 2000.

In accordance with R 299.9515 of the Part 111 administrative rules, this document was prepared to respond to significant comments submitted during the public comment period, and to describe any significant changes made to the draft operating license. Comments were received during the public comment period from Detrex. A summary of the comments, the Department's response to the comments, and any changes made to the draft operating license are presented below.

1. <u>Condition:</u> Condition II.L.3 - General Operating Conditions, Recordkeeping and Reporting, Environmental Monitoring Reports.

Comment: Detrex requested clarification regarding the applicability of Condition II.L.3 to its facility given the fact that the facility is not specifically required to conduct environmental monitoring under the operating license.

Response: Condition II.L.3 is applicable to all facilities. If no specific environmental monitoring is required by the license, the facility does not have to do anything to comply with this condition at this time. However, if environmental monitoring is required by the license in the future, Detrex would be required to submit the results of the environmental monitoring as outlined in Condition II.L.3.

Operating License Changes: None.

2. Condition: Conditions III.G.3 - Container Storage Conditions, Special Requirements for Storage of Ignitable Wastes and Prohibition on Storage of Reactive Wastes, and III.H.4 - Container Storage Conditions, Special Requirements for Incompatible Wastes or Materials.

Comment: Detrex requested clarification that "documenting compliance" with Conditions III.G.2, H.1, and H.2, as required by Conditions III.G.3 and H.4, would be met by: utilizing the procedures found in Attachments 1 and 9 of the operating license, performing daily and weekly inspections of the facility and the hazardous waste storage areas as required in Attachment 2 of the operating license, and using the "facility log" to record the movement and storage of all containers of hazardous waste located within the facility.

Response: Utilizing the procedures found in Attachments 1 and 9 of the operating license, performing daily and weekly inspections of the facility and the hazardous waste storage areas, as required in Attachment 2 of the operating license, and using the "facility log" to record the movement and storage of all containers of hazardous waste located within the facility should result in compliance with Conditions III.G.2, H.1, and H.2. Documentation of compliance with these conditions would be achieved by maintaining the necessary information in the facility operating record in accordance with Condition II.L.1 of the license, as required by R 299.9605 and R 299.9609 and Title 40 Code of Federal Regulations (CFR) 264.17(c) and 264.73, which are adopted by reference in R 299.11003. The information in the "facility log" (part of the facility operating record) regarding the receipt, handling, placement, and movement of wastes at the facility, along with manifest information, should provide the necessary information to document the subject compliance.

Operating License Changes: None.

3. **Condition:** Condition III.I - Container Storage Conditions, Disposition of Accumulated Liquids.

<u>Comment:</u> Detrex requested clarification regarding Condition III.I and its applicability to liquids other than those liquids that could accumulate in the various storage areas and those liquids that may be contained within the secondary containment system provided by the containment trailers, as a result

of a leak or spill of hazardous waste. Specifically, Detrex seeks confirmation that Condition III.I does not apply to the handling of rainwater that accumulates in the truck dock below the containment trailers in Container Storage Area 11.

Response: Condition III.I is derived from R 299.9521(3)(b), R 299.9614(1)(a), and 40 CFR 264.175(b)(5), which is adopted by reference in R 299.11003. 40 CFR 264.175(b)(5) applies to spilled or leaked hazardous waste and accumulated precipitation in secondary containment systems. Thus, Condition III.I applies to spilled or leaked hazardous waste and accumulated precipitation in secondary containment systems. Condition III.I does apply to both hazardous waste and accumulated precipitation in the secondary containment systems for any of the container storage areas, including the containment trailers in Container Storage Area 111. Condition III.I also applies to the secondary containment system for the vehicle unloading/loading area for the indoor container storage areas which was installed in conjunction with Detrex's previous hazardous waste storage operating license. To the extent that one or both of the containment trailers in Container Storage Area 111 fails and hazardous waste is spilled or leaked into the truck dock below the trailers, Condition III.I would apply to the truck dock also.

Operating License Changes: None.

4. Condition: Condition IV.C – Corrective Action Conditions, Identification of Existing Waste Management Units.

Comment: Detrex requested clarification regarding the purpose of Condition IV.C.

Additionally, Detrex requested that Waste Management Unit (WMU) Number 12, which it identifies as tank 21, be removed from the list of WMUs as it was used for storage of product and not hazardous waste.

Response: Condition IV.C is simply a listing of the WMUs that have been identified at the facility. The nature and timing of any sampling will be dependent on many factors, including, in part, the condition of the WMU, the age of the WMU, the wastes stored in the WMU, and history of spills and leaks. At this time, the nature and timing of any sampling will be evaluated via the closure and corrective action processes and the related conditions established in the license.

The operating license identifies WMU Number 11 as tank 21 and WMU Number 12 as tank 22. According to Detrex's application for the hazardous waste storage operating license, both tanks 21 and 22 have been used for storage of non-hazardous waste. Since they were used to manage a waste, both tanks are subject to corrective action as outlined in the operating license.

Operating License Changes: None.

5. **Condition:** Conditions V.A.3 – Schedule of Compliance, Construction of Container Storage Areas 7 and 8, and V.B.6 - Schedule of Compliance, Upgrade of Container Storage Areas 9 and 29.

Comment: Detrex requested an extension of the time allotted for completing construction of Container Storage Areas 7 and 8 and the application of the chemical coating to existing Container Storage Areas 9 and 29 from 30 days after issuance of the license to 45 days after issuance of the license and from 5 days after issuance of the license to 45 days after issuance of the license, respectively. Detrex asserts that this extension is necessary to obtain the necessary supplies and materials, build the containment curbs, and prepare the areas for application of the impervious chemical coating.

<u>Response:</u> The requested extension is granted relative to Conditions V.A.3 and V.B.1 (formerly Condition V.B.6).

Operating License Changes: Condition V.A.3. has been changed by changing the number "30" to "45".

Conditions V.B.6 and B.7 have been renumbered V.B.1 and B.2, respectively, in order to be consistent with the format for numbering conditions that is used throughout the operating license.

Condition V.B.1 has been changed by changing "five" to "45."

NOTICE OF FINAL DECISION

Detrex Corporation
Hazardous Waste Storage Facility
MID 091 605 972

Operating License and Federal Resource Conservation and Recovery Act (RCRA) Permit

January 31, 2001

The Michigan Department of Environmental Quality (MDEQ) issued a hazardous waste management facility operating license to Detrex Corporation (Detrex) pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The operating license was issued on January 31, 2001, and allows Detrex to continue to operate a hazardous waste storage facility at 12886 Eaton Avenue in Detroit, Michigan. Detrex will also receive a federal RCRA permit from the United States Environmental Protection Agency (U.S. EPA) pursuant to the 1984 Hazardous and Solid Waste Amendments to the RCRA. The federal RCRA permit will be issued by February of 2001. Both the Part 111 operating license and the federal RCRA permit will expire ten years from the date of issuance.

The final Part 111 operating license and RCRA permit may be reviewed at the MDEQ, Waste Management Division Office, located on the first floor of the John A. Hannah Building in Lansing, Michigan (contact Ms. Ronda L. Blayer, at 517-373-9548) and at the Detroit Office, located at 300 River Place, Suite 3600, in Detroit, Michigan (contact Ms. Jeanette Noechel, at 313-392-6524). A copy of the license may be obtained, for the cost of reproduction, by contacting Ms. Julie Blanchard of the Hazardous Waste Program Section, at 517-373-9875. Questions or comments concerning Detrex should be directed to Ms. Blayer of the Hazardous Waste Program Section, at 517-373-9548.





P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 6, 2000

Mrs. Ronda Blayer
MDEQ, Waste Management Division
608 W. Allegan
John Hanna Building, 1st Floor
Lansing MI 48933

RE:

NODs - Part B Permit Application Detrex Corporation- Solvents Division 12886 Eaton Ave.

Detroit MI 48227

EPA ID # MID 091 605 972

Dear Mrs. Blayer:

Detrex Corporaiton is providing the following documents to address the remaining NODs concerning the Part B Permit Application for our Eaton Ave Facility. Nine copies of each document are being provided as required.

Proposed Facility layout

Existing Secondary Containment Curb Proposed Secondary Containment Curb

(Storage Areas 7& 8) Portable Ramp Design

Box Van Containment System

Plan of Survey of Lots

(Warner, Cantrell & Padmus, Inc.)

Emergency Equipment Legend

Letters to Emergency Response Agencies /

Organizations

Attachments A-2, B-6, D-2, E-3, F-3, F-6/G-4, G-5,

I-2, & J-1.

Attachment D-3A (replaces current drawing)

OCT 0 9 2000

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Attachment D-3B (replaces current drawing)

Attachment D-3C (replaces current drawing)

Attachment D-3D (replaces current drawing)

Attachment D-3E (replaces current drawing)

Attachment F-6 / G-4 (used in conjunction with

drawing)

G-6

Attachment D-2, and all of attachments in D-3 have been signed by Ron Swan, a Professional Engineer Registered in the State of Michigan, as required in the regulations.

I am also enclosing copies of the letters that are will be sent out to the Emergency Response Agencies / Organizations listed in the Contingency Plan. I will be out of the office next week on vacation and as such will not be able to send these out until I return on October 17th.

If you should have any questions or need additional information regarding the renewal application, please feel free to give me a call.

Sincerely,

David Craig, CHMM, CET

Manager of Environmental and Safety Compliance

CC: File

Facility

STATE OF MICHIGAN



JOHN ENGLER, Governor

REPLY TO

DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973 INTERNET www.deg state milus

RUSSELL J. HARDING, Director

September 27, 2001

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Notice of Deficiency (NOD) for Resource Conservation and Recovery Act (RCRA)

Facility Investigation (RFI) Work Plan for

Detrex Corporation (Detrex), Detroit; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has reviewed your August 7, 2001 RFI Work Plan (Plan) submittal for the above referenced facility. Submittal of the Plan is required pursuant to Conditions IV.E.1 and M of the referenced facility's January 31, 2001 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act. 1994 PA 451, as amended (Act 451).

Upon reviewing the Plan, the WMD reached the conclusion that it is not an actual work plan, since no actual work is proposed, but rather is a document of current conditions at the facility. The Plan was reviewed as such. Based on a review of the Plan, the operating license, and Part 111 and the administrative rules promulgated pursuant thereto, the WMD has determined that the Plan is deficient. A list of the deficiencies is provided below.

Plan Deficiencies

- 1. As a point of clarification, the Plan should be revised to indicate that the primary loading/unloading dock cannot be used for the storage or staging of hazardous wastes and neither can the secondary loading/unloading area. Refer to Page 5 of the Plan for an example.
- 2. As an additional point of clarification, the Plan should be revised to state that hazardous wastes will be able to be stored in waste management units (WMUs) 1-3 (container storage areas 7-9) once the required construction certification documentation is reviewed and approved by the WMD. At this time, only WMUs 4-7 (container storage areas 11 and 29-31) are authorized for the storage of hazardous wastes. Refer to page 8 of the Plan for an example.

- 3. Throughout the Plan, there are references to numbered attachments. However, the actual attachments are lettered, not numbered. Additionally, the majority of the references are inaccurate in that they refer to an attachment that does not contain the referenced information. The numbering/lettering format used when referring to the attachments must be reconciled, all of the attachment references checked and corrected where necessary, and the correct information provided in each of the attachments. Refer to Page 8 of the Plan for an example.
- 4. Additional information is necessary in order for the WMD to accept the analytical data from the May 23, 2001 soil sampling event. The work plan for this sampling event, including the quality assurance/quality control plan and sampling standard operating procedures (SOPs), must be provided in an attachment to the Plan. Information that must be included in the work plan for the sampling event includes, but is not limited to, the basis for selection of sampling locations (both horizontal and vertical), sampling methodology (reliability and discrete sample collection), and all field notes. Refer, in part, to Pages 10 and 20 of the Plan.

Please be advised that the WMD has reviewed information pertaining to the original RFI work plan and report for the August 26, 1994 soil sampling event that was submitted to the United States Environmental Protection Agency (U.S. EPA) in conjunction with the facility's 1992 federal Hazardous and Solid Waste Amendments Permit. Based on this review, the WMD has concluded that it can accept the analytical data from this event for the purposes of characterizing the nature and extent of soil contamination with halogenated solvents at the facility.

- 5. Under "Rationale for Sampling," the Plan suggests that the objective of soil sampling is to verify the metals content in the fill area. However, the primary concern to date has been contamination associated with constituents other than metals. This can be seen by examining the nature of the data collected to date. The Plan must be revised accordingly to correct this inaccuracy. Refer, in part, to Pages 11 and 22 of the Plan.
- 6. The Plan does not appear to contain the boring logs and photoionization detector data referenced in the Plan. This information must be included in the Plan. Refer to Page 11 of the Plan.
- 7. The purpose and applicability of the schedule contained in the Plan is not clear. As is outlined in this NOD, substantial revision of the Plan is necessary, as is the need to collect and analyze additional investigative data. That being said, the purpose of the schedule must be clearly stated in the Plan and the schedule revised to more accurately reflect the remaining work to be completed. Refer to Page 12 of the Plan.
- 8. The information regarding the RFI Project Management Team is not provided in the Plan and must be included. Refer to Page 12 of the Plan.
- 9. All of the analytical data collected by Detrex, and accepted by the WMD, must be used to evaluate the relevancy of the various environmental pathways and compliance with the applicable cleanup criteria established under Part 201, Environmental Remediation, of Act 451, and adopted by reference in R 299.9629. The Plan must include justification should Detrex determine that any of the environmental pathways are not relevant or any of the criteria are not applicable. A summary of the criteria comparison, including both summary tables (including boring location, boring depth, sample identification, parameter, analytical result, and various criteria) and a graphical summary, must be included in the Plan. Refer, in part, to Pages 1: and 23 of the Plan.

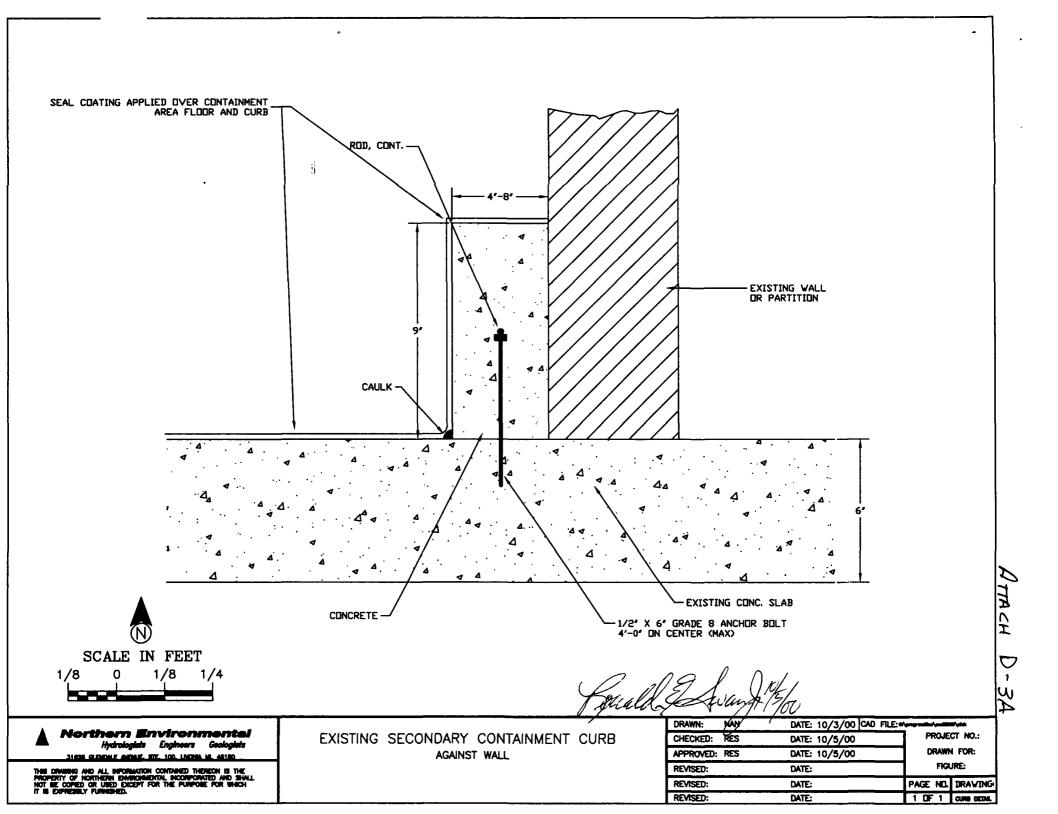
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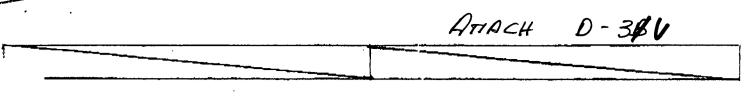
Northern Environmental

 Hydrologists · Engineers · Geologists

PROPOSED EATON AVE. FACILITIES

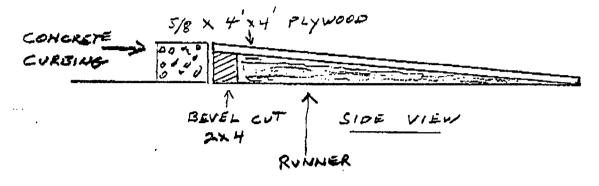
GENERAL LAYOUT

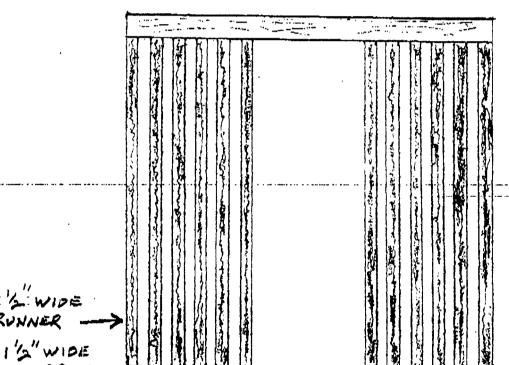




CUTTING EACH 8' 2X4 WILL GIVE YOU 4 PIECES

Portable Ramp



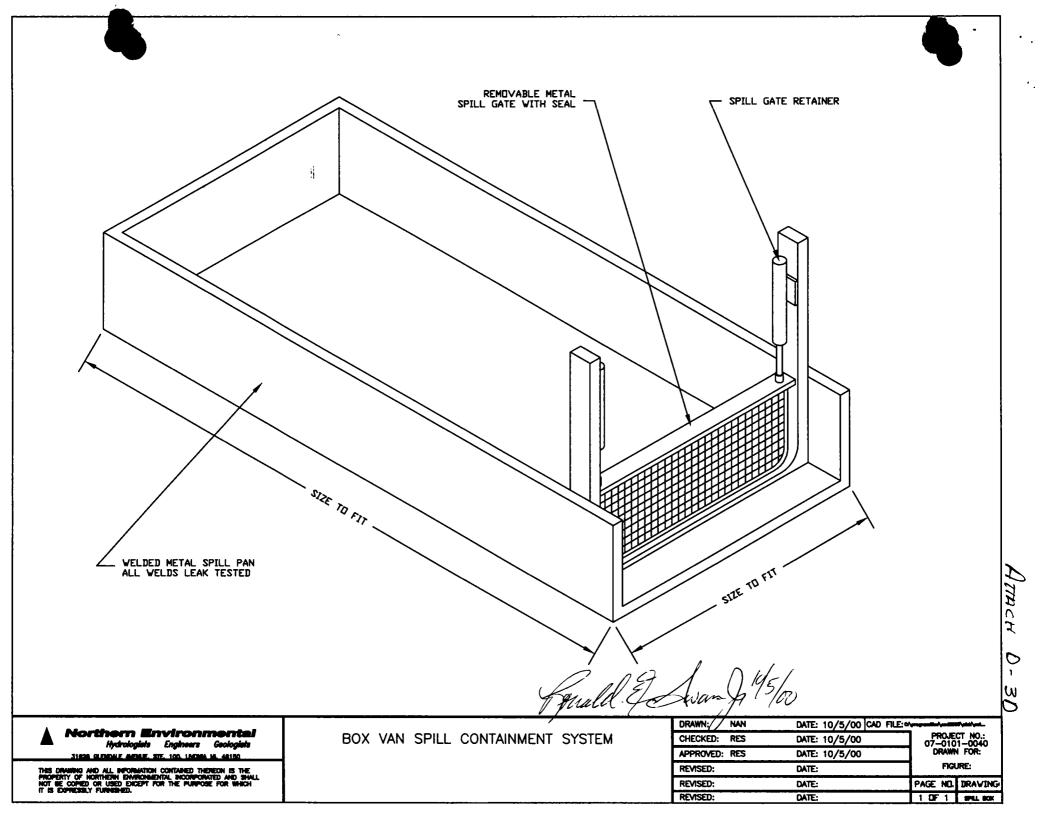


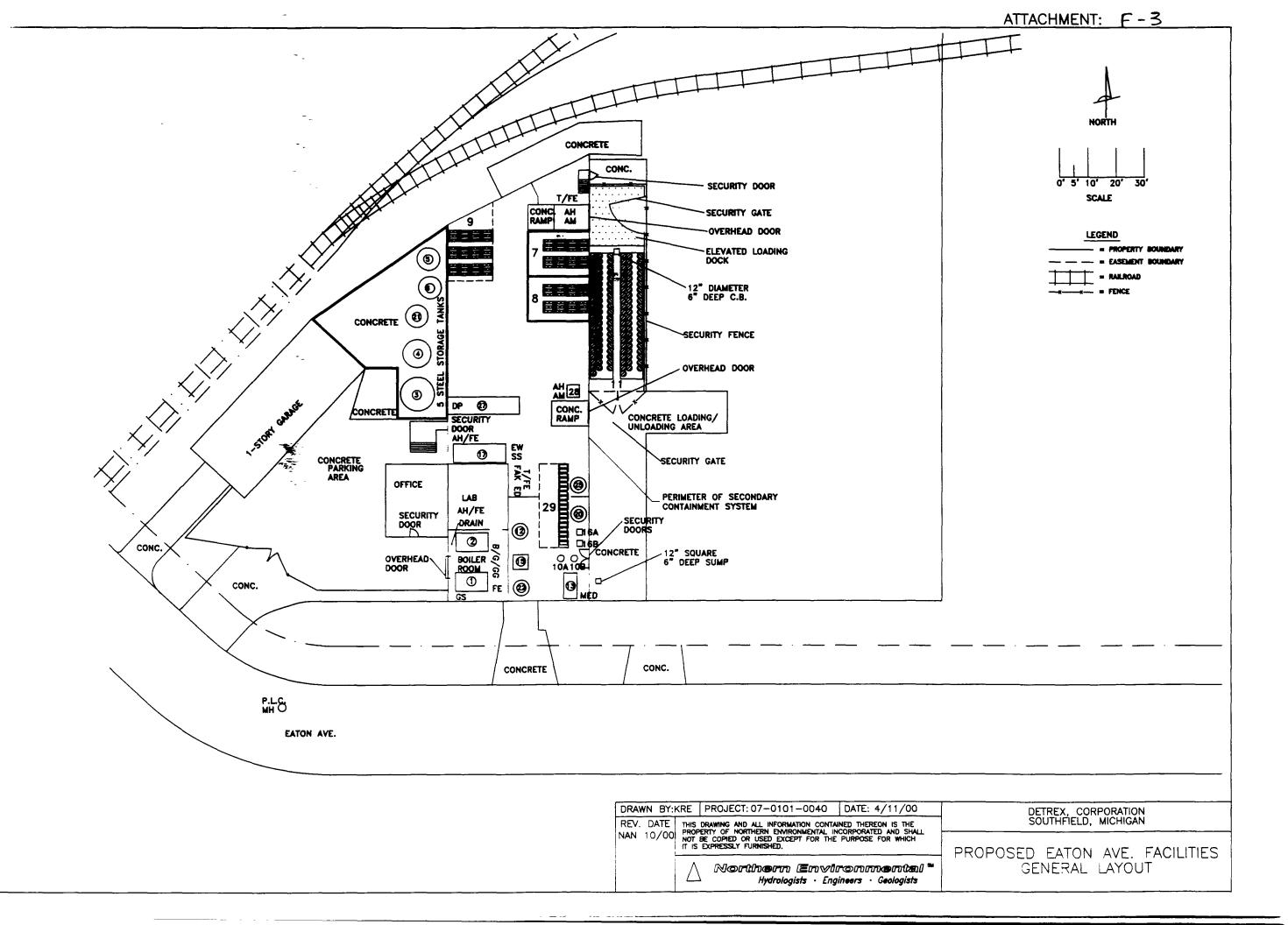
UNDERSIDE VIEW

THEN 11/2" WIDE
RUNNER + SO ON

YOU'LL NEED 6 TO B RUNNERS PER SIDE DEPENDING ON FORKLIFT WIDTH

TOTAL P.02





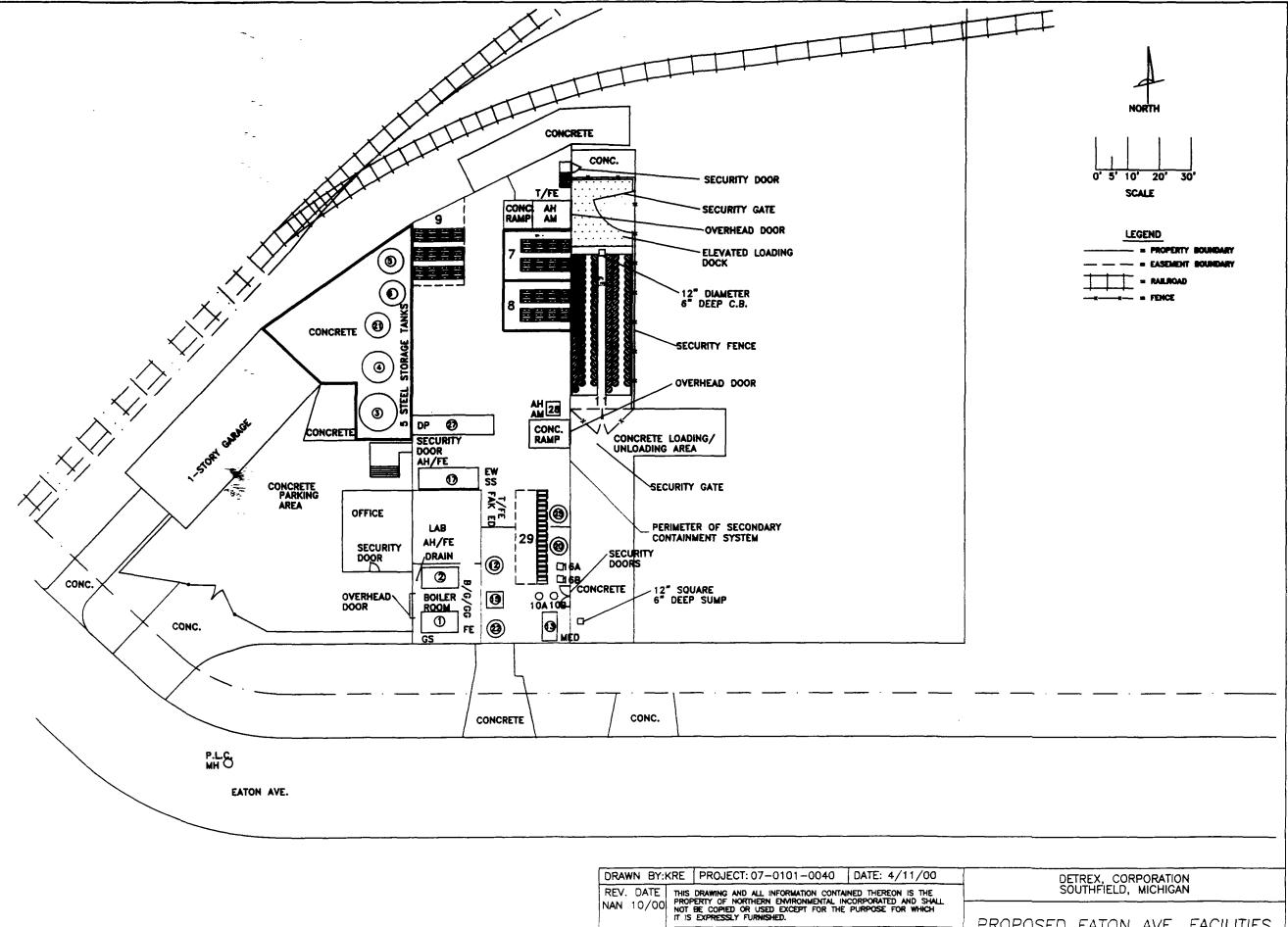
Date: 10/05/00 Revision: 00-1

Attachment F-6

EMERGENCY EQUIPMENT LEGAND

LEGEND	DESCRIPTION			
AM	Absorbent Material			
FAK	First Aid Kit			
SS	Safety Shower			
EWS	Eye Wash Station			
AH	Air Horn			
FE	Fire Extinguisher			
MED	Main Electrical Disconnect			
ED	Telephone			
T	Gloves			
G	Goggles			
GG	Boots			
В	Drum Pump			
DP	Main Gas Disconnect			
GS				

ATTACHMENT: F6 / G4



S:\PROJ\

Northern Environmental **

Hydrologists · Engineers · Geologists

PROPOSED EATON AVE. FACILITIES
GENERAL LAYOUT

Date: 10/05/00 Revision: 00-1

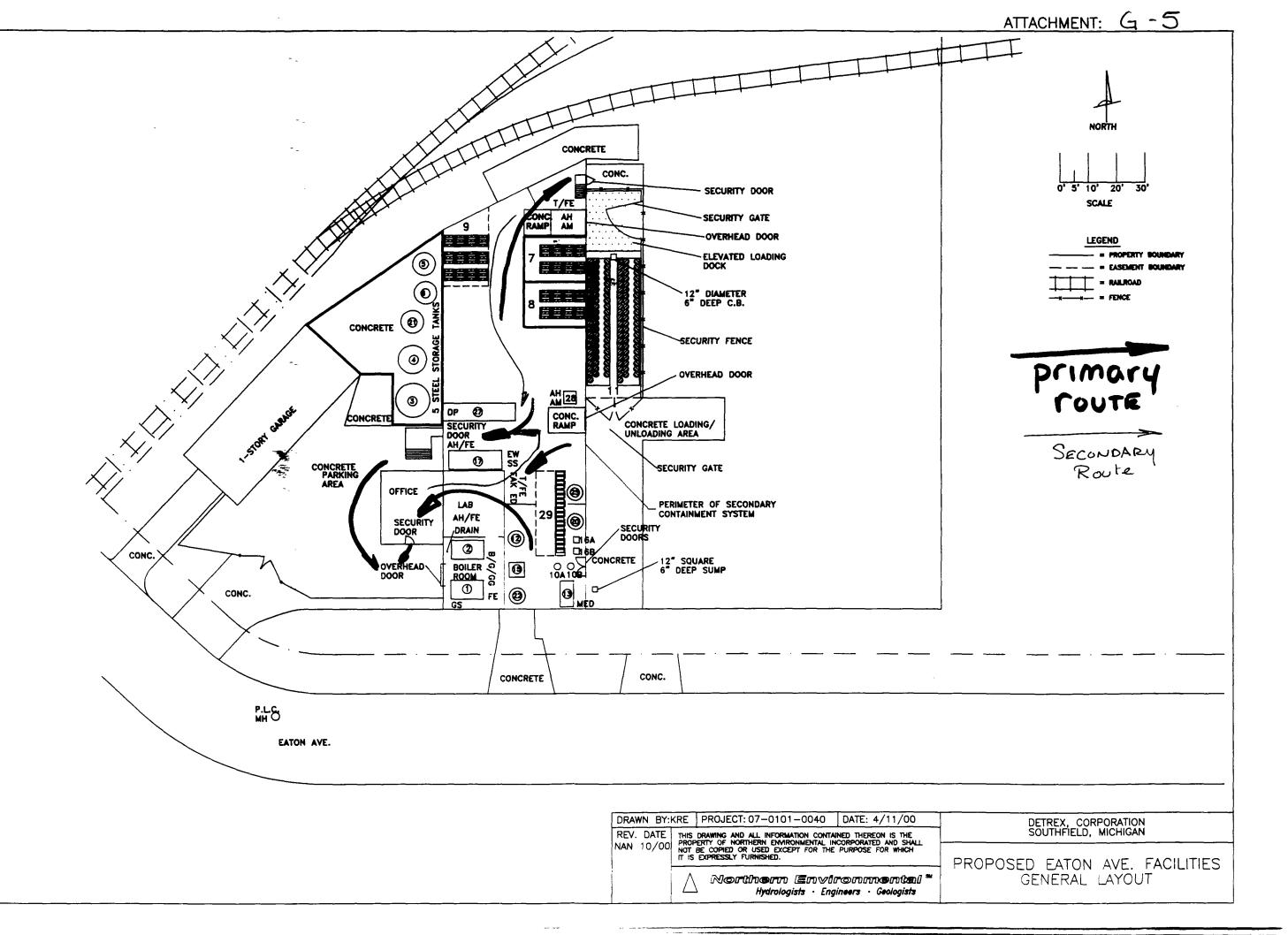
Attachment F-6/G4

EMERGENCY EQUIPMENT LEGAND

LEGEND	DESCRIPTION			
AM	Absorbent Material			
FAK	First Aid Kit			
SS	Safety Shower			
EWS	Eye Wash Station			
AH	Air Horn			
FE	Fire Extinguisher			
MED	Main Electrical Disconnect			
ED	Telephone			
Τ	Gloves			
G	Goggles			
GG	Boots			
В	Drum Pump			
DP	Main Gas Disconnect			
GS				

ATTACHMENT: F6 / G4 CONCRETE CONC. 0' 5' 10' 20' SECURITY DOOR T/FE SCALE CONC AH RAMP AM -SECURITY GATE -OVERHEAD DOOR LEGEND ELEVATED LOADING - = PROPERTY BOUNDARY --- = EASEMENT BOUNDARY = RAILROAD (D) 12" DIAMETER 6" DEEP C.B. CONCRETE (1) SECURITY FENCE $ig(oldsymbol{o} ig)$ OVERHEAD DOOR AH 28 3 DP 🕖 CONC. CONCRETE CONCRETE LOADING/ UNLOADING AREA SECURITY DOOR AH/FE EW SS 0 29 (3) CONCRETE CONCRETE PARKING AREA SECURITY GATE OFFICE PERIMETER OF SECONDARY CONTAINMENT SYSTEM AH/FE SECURITY DOOR SECURITY DOORS DRAIN 2 CONC. 12" SQUARE 6" DEEP SUMP BOILER OF ROOM OF OVERHEAD \
DOOR **3** MED □ FE @ CONC. CONC. CONCRETE P.L.C. MH O EATON AVE. DRAWN BY:KRE | PROJECT: 07-0101-0040 | DATE: 4/11/00 DETREX, CORPORATION SOUTHFIELD, MICHIGAN REV. DATE
THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED. PROPOSED EATON AVE. FACILITIES GENERAL LAYOUT Northern Environmental * Hydrologists · Engineers · Geologists

S.\PROJ\







P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 17, 2000

VIA: Certified Mail 762242 Ms. Vernell Williams, Director of Operations Sinai-Grace Hospital Administration 6071 W. Outer Drive Detroit MI 48235

Re:

Contingency Plan
Detrex Corporation
12886 Eaton Av
Detroit MI 48227

Dear Ms. Williams:

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope. Please feel free to contact me should you have any questions regarding the revised Contingency Plan

Sincerely,

David Craig - CHMM, CET

Manager of Environmental and Safety Compliance

cc:

MDEQ, Hazardous Waste Section

Facility File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

Corporation's Contingency Plan Dated August understand Detrex's need for my company as ar	n Emergency Responder/Organization in the event wledge that this Plan has been reviewed with key
reference.	
Signature of Emergency Responder	
	David Craig, CHMM, CET
Print Name and Title	Mgr Environmental & Safety Compliance
Date	Date

EEFEX



P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 17, 2000

VIA Certified Mail 76224(
Mr Mike Snyder,
VP of Administration
Marine Pollution Control
8631 W. Jefferson
Detroit MI 48209

Re Contingency Plan
Detrex Corporation
12886 Eaton Av
Detroit MI 48227

Dear Mr. Snyder

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111 As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope Please feel free to contact me should you have any questions regarding the revised Contingency Plan

Sincerely,

David Craig - CHMM, CET

Manager of Environmental and Safety Compliance

cc

MDEQ, Hazardous Waste Section Facility
File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

Contingency Plan Dated August 24, 2000 11 Detrex's need for my company as an Emergen services are needed 1 further acknowledge to	ontrol, acknowledge receipt of Detrex Corporation have reviewed the document and understand ency Responder/Organization in the event that such that this Plan has been reviewed with key responsionent is being maintained on file for future reference			
Signature of Emergency Responder				
Print Name and Title	David Craig, CHMM, CET Mgr Environmental & Safety Compliance			
Date	Date			





P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 17, 2000

VIA: Certified Mail 762240 Mr. Ken Markey, Branch Manager K & D Industrial Services, Inc. 6470 Beverly Plaza Romulus MI 48174

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Mr. Markey:

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope Please feel free to contact me should you have any questions regarding the revised Contingency Plan.

Sincerely,

David Craig - CHMM, CET

Manager of Environmental and Safety Compliance

CC.

MDEQ, Hazardous Waste Section Facility

File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

I, Ken Markey of K & D Industrial Services, Inc., acknowledge receipt of Detrex
Corporation's Contingency Plan Dated August 24, 2000. I have reviewed the document and understand Detrex's need for my company as an Emergency Responder/Organization in the event that such services are needed. I further acknowledge that this Plan has been reviewed with key response personnel in my company and that the document is being maintained on file for future reference.

Signature of Emergency Responder

David Craig, CHMM, CET

Mgr. Environmental & Safety Compliance

Date

, etrex



CORPORATION

P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 17, 2000

VIA. Certified Mail Commanding Officer Police Department 2ND Precinct 13530 Lesure Detroit MI 48237

Re Contingency Plan
Detrex Corporation
12886 Eaton Av
Detroit MI 48227

Dear Sir

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope. Please feel free to contact me should you have any questions regarding the revised Contingency Plan.

Sincerely,

David Craig - CHMM, CET

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Manager of Environmental and Safety Compliance

CC

MDEQ. Hazardous Waste Section Facility
File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

- 	lice Department 2 ND Precinct, acknowledge receipt of Detrex
Corporation's Contingency Plan Date	ed August 24, 2000 I have reviewed the document and
understand Detrex's need for my con	mpany as an Emergency Responder/Organization in the event
	ther acknowledge that this Plan has been reviewed with key
	•
response personnel in my company a	nd that the document is being maintained on file for future
reference	
Signature of Emergency Responder	
	David Craig, CHMM, CET
Print Name and Litle	Mgr. I nyironmental & Safety Compliance
Date	,) ite

etrex



CORPORATION

P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

October 17, 2000

VIA: Certified Mail
Mr Glenn Hendrix,
Emergency Coordinator
Detroit Fire Department
Emergency Management Division
250 W Larned
Detroit MI 48226

Re Contingency Plan
Detrex Corporation
12886 Eaton Av
Detroit MI 48227

Dear Mr Hendrix

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111 — As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope. Please feel free to contact me should you have any questions regarding the revised Contingency Plan.

Sincerely,

David Craig - CHMM, CET

- auri illu

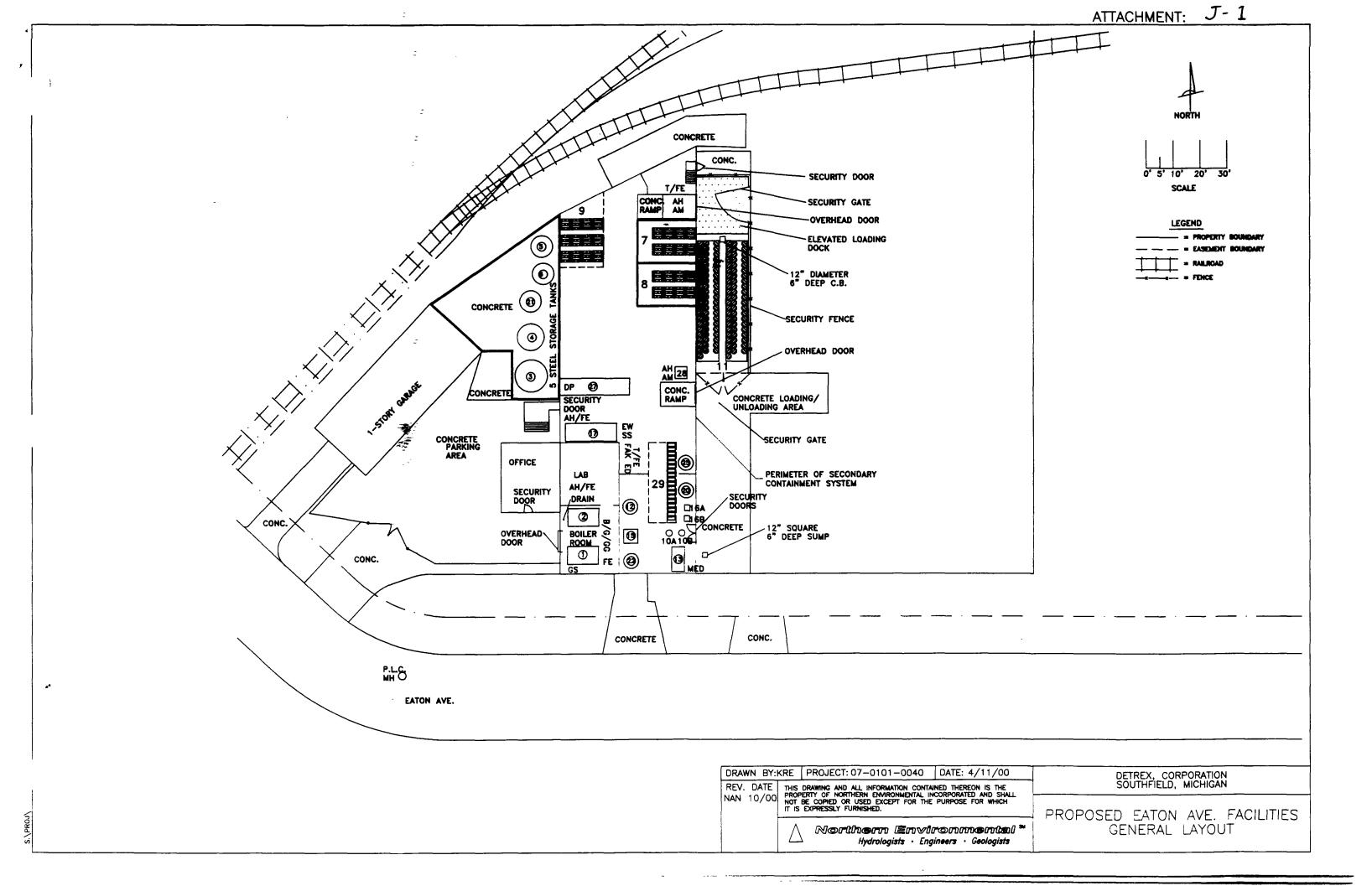
Manager of Environmental and Safety Compliance

CC

MDEQ, Hazardous Waste Section Facility
File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

I, Glenn Hendrix of Detroit Fire Departi	ment Emergency Management Division,
acknowledge receipt of Detrex Corporation's C	ontingency Plan Dated August 24, 2000 I have
reviewed the document and understand Detrex	s need for my company as an Emergency
Responder/Organization in the event that such s	services are needed. I further acknowledge that
this Plan has been reviewed with key response p	personnel in my company and that the document is
being maintained on file for future reference	
Signature of Emergency Responder	
	D 110 1 000 01 000
Print Name and Title	David Craig, CHMM, CET Mg. Invironmental & Safety Compliance
Fint Name and Title	vigi 1 nvironmentat & Safety Compilance
Date	Date



Nabil

From:

David Craig < DCraig@Detrex-HQ.com>

To:

Ronda Blayer <Blayerr@state.mi.us>

Date:

Mon, Oct 2, 2000 5:01 PM

Subject:

revised sections to permit application

Ronda:

attached are the revised Sections C & I along with Attachments C-2A & B. Section C revisions are not shown in strikeout / underline as I was having problems with this particular document using that function (gremlins). Section I does have changes in Underline and strikeout. you will need to turn it off for printing purposes (under tools pull down menu).



MNOHWI PERMIT SECTION - WMB Waste, Pesticides & Toxics Division U.S. EPA - REGION 5

I will be out of the office tomorrow but you can get a hold of me if necessary. my mobil phone number is 248-330-3184. While I may not be able to address items while on the road, I will take care of them first thing Wednesday morning.

David

Date: Revision: Page:

00-3 24

08/24/00

3. Have the generator send a copy of the form via facsimile to the Facility with the complete and correct information on the form. The facsimile copy will be held as would an original in the files.

A copy of each LDRF is retained at the Facility for the retention period required under 40 CFR 268.

Should Detrex Corporation ship LDR wastes from the Facility it will complete the necessary notification and certifications (i.e. LDRFs) to accompany the waste shipment off site. In many cases, these LDRFs will be generated based on the original generator's knowledge of the waste, and the testing and profiling information used in the initial characterization of the waste. In the cases where there may be a question regarding the level of a constituent, or if one is present, analytical testing may be conducted.

C-3a(1) Spent Solvent And Dioxin Wastes [40 CFR 264.13(a)(1), 268.2(f)(1), 268.7, 268.30, 268.31]

One of the methods noted in Section C-3a(2), will be used to determine the presence of spent solvent wastes (F001, F002, F003, & F005). Generator process knowledge will be documented on the Waste Material Profile Report and LDRF. The LDRF will provide additional information regarding the appropriate treatment standards for the waste and whether it has already been treated to the appropriate standards.

Dioxin wastes (F020-F023; F026-F028) are not accepted at the Facility.

C-3a(2) <u>Listed Wastes</u> [40 CFR 264.13(a)(1), 268.7, 268.33, 268.34, 268.35, 268.36, 268.41, 268.42, 268.43]

There are two methods that a generator can use to provide documentation regarding the constituents present in the waste stream.

- 1. Perform a one-time analysis of the waste stream including total metals or TCLP testing for underlying constituents, if the generator has not already performed these tests; or
- 2. Use defensible generator knowledge of the waste stream providing raw materials used and information on the process generating the waste.

00-MI-C.

Date: 08/24/00 Revision: 00-3 Page: 25

C-3a(3) Characteristic Wastes
[40 CFR 261.3(d)(1), 264.13(a)(1), 268.7, 268.9, 268.37, Part 268
Appendix I, Part 268 Appendix IX]

One of the methods noted in Section C-3a(2), will be used to determine whether characteristic wastes meet the applicable treatment standards, or to demonstrate that the waste has been treated by the appropriate specified treatment technology. In addition, the generator's process knowledge or analytical data will be used to identify the underlying hazardous constituents that are expected to be present in wastes. The generator's process knowledge and analytical data will be documented on the Profile Sheet and LDRF.

C-3a(4) Waste Mixtures and Wastes with Overlapping Requirements [40 CFR 264.13(a), 268.7, 268.41(b), 268.43(b), 268.45(a)]

Generator process knowledge and analytical data, whenever deemed necessary, will be used to demonstrate that waste mixtures and wastes carrying multiple waste codes are properly characterized. Waste that carry more than one characteristic or listed Reactivity Group Numbers (RGNs) will be identified with a number for each characteristic.

C-3b NOTIFICATION, CERTIFICATION, AND RECORDKEEPING REQUIREMENTS
[40 CFR 264.73, 268.7,268.9(d)]

C-3b(1) Retention of Generator Notices and Certifications [40 CFR 268.7(a)]

Detrex Corporation will retain a copy of all notices, certifications, demonstrations, data, and other documentation regarding land disposal restrictions as required by Act 451 Part 111.

C-3b(2) Notification and Certification Requirements for Treatment Facilities [40 CFR 268.7(b)]

No chemical or physical treatment of wastes is conducted at this site. All wastes are eventually transported off site to a properly permitted facility. Land Disposal Restrictions Forms are prepared as appropriate.

00-MI-C.

25

ATTACHMENT C-2A

CHEMICAL PROPERTIES OF SITE-RELATED CHEMICALS DETREX CORPORATION DETROIT MICHIGAN

Chemical	Molecular Weight (g/mol)	Aqueous Solubility At 20 ^o C – 25 ^o C (mg/l)	Vapor Pressure At 20 ^o C – 25 ^o C Mm Hg	Henry's Law Constant at $20^{\circ}C - 25^{\circ}C$ (atm-m ³ /mol)	Octanol-Carbon Partition Coefficient Koc (mg/g)	Flashpoint ^O C	Ignitable Chemicals
	167.04					1	· · · · · · · · · · · · · · · · · · ·
1,1,1,2-Tetrachloroethane	167.84						
1,1,1-Trichloroethane	133.4	3.47E+02	124	8.0E-03	1.05E+02	none	
1,1,2,2-Tetrachloroethane	167.84						
1,1,2-Trichloro-1,2,2- trifluoroethane	187.38	1.70E+02	362.5	5.26E-01	3.89E+02		
1,1-Dichloroethane	98.97	5.06E+03	22.7	5.87E-03	3.00E+01	-6	
1,1-Dichloroethylene	96.95	2.73E+02	591	1.90E-01	6.46E+01	-15	
1,2-Dichloroethane	98.96	8.52E+03	78.7	9.77E-04	1.9E+01	13	
1,4-Dichlorobenzene	147.01	8.7E+01	1.76	1.50E-03	1.58E+02	65.6	
2,4-Dinitrotoluene	182.15					225.5	
Acetone	58.08	Soluble	400 mm @ 39.5°C			- 17.8	*
Arsenic	74.92	Insol. in Water	1 mm @ 372° C				
Barium	137.34	Insol. in Water	10 mm @ 1049° C				* Solid
Benzene	78.11	1.79E+03	95.2	5.43E-03	7.08E+01	-11	*
Cadmium	112.4		1 mm (@ 394a°C)	NA	NA		
Carbon Disulfide	76.13		400 mm @ 28°C			- 30	
Carbon tetrachloride	153.8	8.05E+02	113.8	3.04E-02	2.24E+02	nonflammable	
Chlorobenzene	112.56	4.72E+02	11.9	3.45E-03	3.31E+02	28	
Chloroform	119.39	7.95E+03	246	4.35E-03	4.37E+01	none	· · · · · · · · · · · · · · · · · · ·
Chromium	51.996	insoluble	1 mm (@ 1616°C)	NA	NA		
Cyclohexanone	96.12		4			33.89	
Dichlorodifluoromethane	134.94						

ATTACHMENT C-2A

CHEMICAL PROPERTIES OF SITE-RELATED CHEMICALS DETREX CORPORATION DETROIT MICHIGAN

Chemical	Molecular Weight (g/mol)	Aqueous Solubility At 20 ^o C – 25 ^o C (mg/l)	Vapor Pressure At 20 ^o C – 25 ^o C Mm Hg	Henry's Law Constant at 20°C - 25°C (atm-m³/mol)	Octanol-Carbon Partition Coefficient Koc (mg/g)	Flashpoint ^O C	Ignitable Chemicals
Dichloromethane	84.93	1.30E+04	434.9	2.68E-03	8.71	1	
	1		434.9	2.08E-03	8./1		
o-Dichlorobenzene	147.01	insoluable			0.007.00	66	
Endrin	380.9	2.40E-02	2.00E-07	5.00E-07	8.32E+03	27	
Ethyl Acetate	88.12		100			- 4.4	*
Ethyl Benzene	106.18		10			15	*
Ethyl Ether	74.14		442			- 45	*
Heptachlor	373.35	5.6E-02	3.00E-04	2.3E-03	2.19E+04		
Hexachlorobenzene	284.79	6.20E-03	1.90E-05	1.3E-03	3.9E+03	242	
Hexachloroethane	236.76	5.00E+01	0.21	2.80E-03	2.19E+03		
Isobutanol	74.14		10			27.78	*
Lead	207.2	insoluble	10 mm (@ 1162°C)	NA	NA		<u> </u>
Mercury	200.59	5.60E-02	2.00E-03			not flammable	
Methanol	32.05		100				*
Methyl ethyl ketone	72.11	2.39E+05	90.6	1.05E-05	1.23E-00	-9	*
Methyl Isobutyl Ketone	100.16	2 gm / 100 ml	16 mm			17	*
Monofluoromethane	34.04	very	760 mm @ -78.2°C		· · ·		*
n-Butyl Alcohol	74.14		5.5			35	*
Nitrobenzene	123.12		1 mm @ 44.4°C			87.78	
Pyridine	79.11		10 mm @ 13.2			20	*
Selenium	78.96	insoluble	1 mm (@ 356°C)	NA	NA		
Silver	107.868	soluble	100 mm (@ 1865°C - liquid)	NA	NA		

ATTACHMENT C-2A

CHEMICAL PROPERTIES OF SITE-RELATED CHEMICALS DETREX CORPORATION DETROIT MICHIGAN

Chemical	Molecular Weight (g/mol)	Aqueous Solubility At 20 ^o C – 25 ^o C (mg/l)	Vapor Pressure At 20 ^o C – 25 ^o C Mm Hg	Henry's Law Constant at $20^{\circ}C - 25^{\circ}C$ (atm-m³/mol)	Octanol-Carbon Partition Coefficient Koc (mg/g)	Flashpoint ^O C	Ignitable Chemicals
Tetrachloroethylene	165.82	1.50E+03	18.47	1.49E-02	2.09E+02	none	
Toluene	92.15						*
Trichloroethylene	131.4	1.10E+03	69	1.03E-02	1.26E+02		
Trichloromonofluoromethane	137.36						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Vinyl Chloride	62.5		2,600			- 8	
Xylene	106.18		6.72			25	*

ATTACHMENT C-2b

TOXICOLOGICAL DATA FOR SITE-RELATED CHEMICALS DETREX CORPORATION DETROIT, MICHIGAN

Chemical	Toxicological Classification	RfD Oral-Chronic (mg/kg-day)	RfD Inhalation- Chronic (mg/kg-day)	CSF Oral- Chronic [1/(mg/kg-day)]	CSF Inhalation- Chronic [1(mg/kg-day)]
Arsenic					
Acetone	A4				
Barium	С	1.00E-01	1.40E-01		
Benzene	B2			9.10E-02	9.10E-02
Cadmium	С	9.00E-03		6.00E-01	1.75E-01
Carbon Disulfide					
Carbon tetrachloride	B2	6.00E-02	8.75E-01	7.50E-03	1.65E-03
Chlorobenzene					
Chloroform	D	3.00E-04			
Chromium III	B2	5.00E-04		4.50E-00	4.50E-00
Chromium VI	B2	8.00E-04		1.60E-00	1.60E-00
Cyclohexanone	A4				
1,1-Dichloroethane	D	2.00E-02	5.70E-03		
1,1-Dichloroethylene	B2	1.00E-02		6.10E-03	8.10E-02
1,2-Dichloroethane		1.00E-00			
1,4-Dichlorobenzene	A	5.00E-03			4.20E+01
2,4 Dinitrotoluene	B2		2.29E-01	2.40E-02	
o-Dichlorobenzene	A4				

EPA Weight of Evidence Ranking & TLV Values:

A / A1 - Known human carcinogen

B1 / A2- Probable human carcinogen (limited evidence in humans)

B2 - Probable human carcinogen (sufficient evidence in animal studies)

A3 - confirmed animal carcinogen with unknown relevance to humans

C - Probable human carcinogen (limited evidence in animal studies)

D / A4 - Not classified (inadequate evidence of carcinogenicity in animal studies)

A5 - Not Suspected as a Human Carcinogen

1/3

Date: 08/24/00

ATTACHMENT C-2b

TOXICOLOGICAL DATA FOR SITE-RELATED CHEMICALS **DETREX CORPORATION DETROIT, MICHIGAN**

Chemical	Toxicological Classification	RfD Oral-Chronic (mg/kg-day)	RfD Inhalation- Chronic (mg/kg-day)	CSF Oral- Chronic [1/(mg/kg-day)]	CSF Inhalation- Chronic [1(mg/kg-day)]
Dichlorodifluoromethane	C	1.00E-03		1.40E-02	1.40E-02
Dichloromethane	B2				
Endrin	D	under review	under review		
Ethyl Acetate					
Ethyl Benzene					
Ethyl Ether					
Heptachlor	D	6.00E-01	2.86E-01		
Hexachlorobenzene					
Hexachloroethane					
Isobutanol					
Lead	D	5.00E-03			
Mercury	D	5.00E-03			
Methanol		_			
Methyl ethyl ketone	B2	1.00E-02			
Monofluoromethane					
n-Butyl Alcohol	D				
Nitrobenzene	D	9.00E-02	3.00E-01		
4-Methyl-2-pentanone (MIBK)					

EPA Weight of Evidence Ranking & TLV Values:

A / A1 - Known human carcinogen

B1 / A2- Probable human carcinogen (limited evidence in humans)

B2 - Probable human carcinogen (sufficient evidence in animal studies)

A3 - confirmed animal carcinogen with unknown relevance to humans

C - Probable human carcinogen (limited evidence in animal studies)

D / A4 - Not classified (inadequate evidence of carcinogenicity in animal studies)

A5 - Not Suspected as a Human Carcinogen

2/3

Date: 08/24/00

ATTACHMENT C-2b

TOXICOLOGICAL DATA FOR SITE-RELATED CHEMICALS DETREX CORPORATION DETROIT, MICHIGAN

Chemical	Toxicological Classification	RfD Oral-Chronic (mg/kg-day)	RfD Inhalation- Chronic (mg/kg-day)	CSF Oral- Chronic [1/(mg/kg-day)]	CSF Inhalation- Chronic [1(mg/kg-day)]
Pyridine					
Selenium	B2	under review	under review		under review
Silver		3.00E-00	8.60E-00		
1,1,1,2-Tetrachloroethane			••		
1,1,1-Trichloroethane	A	under review	under review	2.90E-02	2.90E-02
1,1,2,2-Tetrachloroethane	B1	5.00E-04 (water)			6.30E-00
1,1,2-Trichloro-1,2,2- trifluoroethane	B2	7.00E-04		1.30E-01	5.25E-02
Tetrachloroethylene	A3				
Toluene	D / A4				
Trichloroethylene	A5				
Trichloromonofluoromethane	A4				
Vinyl Chloride	A1				
Xylene	A4				

EPA Weight of Evidence Ranking & TLV Values:

A / A1 - Known human carcinogen

B1 / A2- Probable human carcinogen (limited evidence in humans)

B2 - Probable human carcinogen (sufficient evidence in animal studies)

A3 – confirmed animal carcinogen with unknown relevance to humans

C - Probable human carcinogen (limited evidence in animal studies)

D / A4 - Not classified (inadequate evidence of carcinogenicity in animal studies)

.

A5 - Not Suspected as a Human Carcinogen

3/3

Date: 08/24/00

ATTACHMENT C-4

SAMPLE GENERATOR'S WASTE MATERIAL PROFILE SHEET & ANNUAL RECERTIFICATION LETTER

Following the removal of the container inventory, the interior and exterior container storage areas and their respective secondary containment systems will be swept. This will include containment storage areas 7, 8, 9, 29, and the flammable storage trailers (11), if final closure is being performed. Subsequently, the area designated for closure will be carefully inspected to identify any potential cracks, gaps, or unsealed joints in the secondary containment area. Any cracks, gaps or unsealed joints will be repaired prior to proceeding with decontamination to ensure that all rinse water is contained.

The secondary containment areas will then be decontaminated by a floor wash/scrubbing operation followed by a triple rinse. Contaminated media generated will be collected using pumps, sponges, and/or another method, placed in DOT-approved containers, and transported off-site. Wastes will be sent to a permitted TSDF unless waste characterization sampling indicates alternate disposal is appropriate. It is noted that during partial closure, hazardous wastes generated may be managed in an on-site hazardous waste management unit. Solid wastes which are not generated from hazardous waste may be managed in an appropriate location at the Facility.

Decontamination of the secondary containment areas will be verified by collecting a sample of the final rinsate from each secondary containment area and submitting the sample for analysis of the all chemicals of concern (COC). Analyses will be by an approved method of SW-846. The "cleanup" level will be based on the environmental remediation parameters found in Part 201 of Act 451 as adopted by reference in Part 111, at the time of closure.

Chemcials of Concern will be based on the approved waste codes found in attachment I-1 for which the facility has record of accepting. This list of chemicals and their associated cleanup level will be submitted to MDEQ for review and approval prior to initiation of any cleanup or sampling. COCs that have never been accepted at the facility it will not be included into the test parameters.

In the event that test results indicate that a COC listed in Part 201 of Act 451 still exists above the required criteria, further cleaning, as necessary, would be performed.

Once decontamination is complete, soil sampling for COCs beneath any cracks, gaps or unsealed joints which may reasonably have provided a migratory pathway to underlying soils will be required. Detrex will submit to MDEQ all proposed sampling locations for review and approval prior to the initiation of any sampling event. The preservation method for the soil will be based on the COC. VOCs will be collected using Method 5035 or EnCore Sampler. Methods for preserving semivolitals and metals will be based on the analytical test methods listed in SW-846, specifically method 6010 for metals and method 8270B for semivolitals. At each sampling location, the boreholes will

00-MI-I

be advanced through the fill material, the native soil, and completed in the top of the clay. Split-spoon samples, will be collected at 1 foot, and then at 5 foot intervals to the endpoint for each borehole, which is the top of the clay unit. Following sampling collection, each borehole will be backfilled with a bentonite/clay mixture. Each sample will be analyzed using a PID meter. The highest PID reading in any borehole as the endpoint sample will be analyzed.

In the event a piece of equipment can not be decontaminated to the required cleanup level agreed to between Detrex and MDEQ, the piece of equipment will be characterized and disposed at an appropriately permitted facility.

All equipment used during decontamination which may have come in contact with potentially contaminated substances or a potentially contaminated surface will also be decontaminated prior to demobilization from the site. The decontamination of equipment may also involve steam cleaning. The washwater will be collected in an appropriate manner and handled as described above.

I-1e(4) Closure of loading / unloading area [40 CFR 264.178, 264.112(b)(3), 270.14(b)(13)]

The entire outdoor concrete loading / unloading area and the dock below the flammable storage trailers will be swept and subsequently cleaned and sampled using the same protocols described above in section I-1e(3), for the container storage area and associated secondary containment system.

The soil sampling, conducted as part of partial or final closure, will be based on information in the closure plan and on consultation with the MDEQ, WMD. Boreholes will be drilled through the concrete at the location of the sump in the loading/unloading area and under the flammable storage trailers, and at the locations where any significant cracks are observed. The proposed location of these areas will be provided to the MDEQ for review and approval prior to initiating any sampling activities.

The same method for obtaining and perserving samples as found in I-1(e)3 will be used for the outside loading and unloading areas as well as below the flammable storage area.

00-MI-l PAGE: 10

Nabil

From:

David Craig < DCraig@Detrex-HQ.com>

To:

Ronda Blayer <Blayerr@state.mi.us>

Date:

Thu, Sep 28, 2000 12:55 PM

Subject:

Eaton Ave. Application

Ronda:

Attached are Sections B, C.final, D, G & F with the requested revisions made. I will address the other issues shortly. Please call if you have any other questions.

10) Flood Control

As indicated in Section B-3b of this operating license application, the Detrex Facility is not located in an area designated as a 100-year floodplain. As such, flood control structure/devices are not required. A Flood map of the area is provided in Attachment B-7

The outdoor loading / unloading area secondary containment system (i.e., the perimeter curbing and drive-over access ramp has been designed to accommodate a 24-hour 100-year rainfall event.

11) Hazardous Waste Management Units

Attachment B-6 is a Facility plan, which locates all existing and proposed hazardous waste management units.

12) Runoff Control

Most of the hazardous waste management units are located within a single enclosed building, which eliminates runoff. The only area not enclosed by the building is the facility's flammable storage area, which are located in the northeast corner of the Facility. Surface water runoff is directed away from the building structure in all areas except along the eastern wall.

A 12-inch square, 6-inch deep sump is located within the concrete loading/unloading area and the flammable storage area to provide runoff control. The accumulated runoff collected is visually inspected for the presence of a sheen, color, odor, and clarity. If it passes these parameters it is discharged into the municipal combined sanitary/storm water sewer system. If the water fails the parameters, it will be collected and tested. Waters failing discharge criteria will be sent for off-Site disposal in accordance with Federal, State and Local regulations.

B-2B ADDITIONAL REQUIREMENTS FOR LAND DISPOSAL FACILITIES [40 CFR 270.14(C)(3) AND (4)(I), 264.95, 264.97]

Detrex Corporation does not and has never operated a land disposal facility at the Facility located at the Detroit, Michigan Facility.

00-MI-B

TABLE B-1

LOCATION IN APPLICATION OF TOPOGRAPHIC MAP REQUIREMENTS

Ite	ms Required In Application For Topographic Maps	Location (Attachment Nos.)
1.	Topographic map extending 2,000 feet beyond facility	B-1
2.	Contour intervals	B-1, B-2
3.	Map scale and date	B-1, B-2, B-5, B-6, B-7, B-8
4.	100-year floodplain area	B-7
5.	Surface water including intermittent streams	B-1, B-2, B-7
6.	Surrounding land uses	B-2, B-3
7.	Wind rose	B-4
8.	Orientation of the map	B-1, B-2, B-3, B-5, B-6, B-7, B-8
9.	Legal boundaries of the facility	B-2
10.	Access control and internal roads	B-2, B-5
11.	Injection and withdrawal wells	N/A
12.	Buildings	B-2, B-5, B-8
13.	Sewers	B-2
14.	Loading and Unloading Areas	B-2, B-5, B-8
15.	Fire Control Facilities	B-5
16.	Barriers for drainage and flood control	N/A
17.	Location of container and tank storage areas	D-2
18.	Location of process equipment	D-2

C-2a PARAMETERS AND RATIONALE [40 CFR 264.13(b)(1)]

The waste screening (i.e., fingerprinting) parameters for each waste type is presented in Attachment C-5. The parameters have been selected to fulfill the requirements of 40 CFR Part 261 with respect to the storage of the waste at this Facility. Figure C-1, found in Attachment C-5, provides a flow chart of the waste screening decision-making process. The rationale for each test is described in the following:

- 1. Flammability provides verification that wastes which are not anticipated to be flammable, based on manifest information, are in fact non-flammable;
- 2. pH Testing provides verification of corrosivity of wastes for storage purposes;
- 3. Water Reactivity verifies that the waste stream in question does not react with water. This is necessary in order to provide information for the emergency coordinator in the event of a fire;
- 4. Compatibility Test provides compatibility verification for similar waste streams;
- 5. Paint Filter Test determine if a waste stream that is received and identified as a solid waste contains free liquid. The necessity of this test will be decided during the screening process to determine the method of storage as well as the final method of disposal; and
- 6. Visual & Olfactory characteristics of odor, color, appearance, and any other characteristic that Facility personnel help identify the waste.
- 7. Cyanide Spot Test provides an indication if waste contains reactive cyanide.

C-2b TEST METHODS [40 CFR 264.13(b)(2), 264.13(c)(1)]

Testing will be performed as detailed in the Quality Assurance Project Plan (QAPP) provided in Attachment C-6 as briefly described in the subsections below. The QAPP provides the policies, objectives, and specific quality assurance (QA) and quality control (QC) procedures to achieve the data quality objectives of the testing. All analyses are conducted on a grab samples collected

in accordance with the procedures outlined in Section C-2c. The results of these tests are recorded and evaluated with respect to the pre-approved information.

C-2b(1) Flammability

A flammability potential screening analysis will be performed, on a discrete sample. At least 10% of the each hazardous waste stream received from each generator will be tested in accordance with the requirements of the QAPP and Attachment C-5. For shipments of less than 10 containers, the Facility will sample at least one container. If the test concludes the sample is non-flammable, then the waste stream represented by this discrete sample will have passed the flammability criteria. If the test concludes that the sample failed the flammability potential screening analysis, the sample may be retested to determine its flash point using the Pensky-Martens test (ASTM D93-90 found in Attachment C-6). If the material has a flash point above 140°F, the material will be accepted as non-flammable. If it is 140°F or less it will be classified as a flammable.

Any container received from the same line item on a manifest as the rejected container will be tested using the flammability potential screening analysis. Any additional container, which fails this test, may be either rejected or retested using the Pensky-Martens test as stated above. Material failing this test will be subject to the procedure specified in Section C-2d(5), <u>Discrepancies & Waste Rejection Procedures</u>

Since the Facility is also permitted to accept flammable materials the generator may be contacted to reprofile the material. In such cases a new profile sheet will be generated along with the appropriate land ban form. A discrepancy notation will be made on the manifest and the material will be transferred to the appropriate area for storage. In the event that the Facility is unable to accept the waste, it will be rejected according to the rejection procedures in Section C-2d(5).

C-2b(2) Water Reactivity and pH Testing

A Water Reactivity and pH test will be performed, on a discrete sample. At least 10% of each waste stream received from each generator will be tested in accordance with the requirements of the QAPP and Attachment C-5. For shipments of less than 10 containers, which require these tests, the Facility will sample at least one container. To determine if a waste is reactive with water, or exhibits an unexpected pH, Detrex will measure and record the pH on a sample when required as noted in Appendix C-5 using the method described in the QAPP and at our discretion as allowed under Section C-2d(4), Additional Testing. The

the QAPP and in Attachment C-7. The sampling procedures are provided for both liquid and solid samples.

The screening process for waste consists of visual observation on every container received at the Facility. Up to 10 containers (550 gallons) are unloaded into the staging area (see section D-1c for more details), opened and visually checked. At least one container is then sampled and tested as required under Attachment C-5 for the required parameters (flammability, water reactivity, pH, cyanide, compatibility, and paint filter test). When containers need to be weighed in to determine the weight of material in the container, the scale at the drumming station may be used in addition to the scale in the staging area for obtaining weight; no sampling will occur here.

In the event that containers are not representatively sampled or cannot be representatively sampled, the waste will not be accepted by the Facility.

All containers shipped to the Facility will be given a container number for tracking purposes. Other markings will be used to indicate the need for rejecting containers or for those containers failing screening. The marking will be placed next to the Hazardous Waste Marking. Containers passing the screening will only be marked with a container number. Rejected containers can remain in the container staging area (area 29) if no compatibility problems exist. These rejected containers do not count toward the 10-container allowance for this area.

The required screening on the 10 containers must be completed before additional drums may be brought into the screening area. Unloading in this fashion is done to speed up release of the transporter and reduce container handling by allowing any additional testing of the containers prior to placing them into their storage area(s).

In the event that a container to be unloaded is found to be incompatible with materials already unloaded, the containers presenting the incompatibility problem will be moved to an appropriate storage area as detailed in Section F. The movement of waste from one storage area to another is only for wastes previously accepted by Detrex. This is in no way being construed to allow Detrex the ability to directly offload material without completion of screening and meeting the compatibility requirements, while formally accepting the hazardous wastes.

All screening will be complete prior to signing the manifest and releasing the transport vehicle.

C-2d FREQUENCY OF ANALYSIS [40 CFR 264.13 (a)(3), 264.13(b)(4)]

C-2d(1) Waste Characterization

Waste characterization/profiling is completed for every waste stream that may be received at the Facility. The waste characterization will be completed using one of the methods noted in Section C-3a(2). Waste characterization may, or may not, require additional laboratory testing depending on the generator's knowledge of the waste and the waste generation process. A Profile Sheet or a re-certification letter/sheet must be renewed at least annually.

C-2d(2) Waste Screening

Screening, using parameters described in Section C-2a, are conducted on each shipment of waste received at the Facility.

It should be noted that this Facility may also accept wastes from other Detrex facilities. These facilities, like Eaton Ave., are also required to profile and test the materials prior to acceptance in accordance with their specific waste analysis plan. Consequently, when this Facility accepts wastes manifested from other Detrex facilities, the wastes have already been profiled and tested in accordance with a waste analysis plan. Other Detrex facilities are required to screen waste coming in according to parameters similar to the Analytical Testing Parameters found in Appendix C-5. Since performing a second screening at this point will not provide any additional information, the Facility may meet the testing requirement by obtaining a copy of the test results from the other Detrex Facility prior to acceptance of the particular waste shipment. If the parameters and methodology for both facilities are the same, then the analysis will be accepted. If the analysis lacks any parameter or the methodology differs, the facility will analyze for that parameter prior to accepting the waste. The analysis for wastes accepted in this manner will include both the initial analysis, performed by another Detrex facility, and any additional analysis performed by personnel at this Facility. These results will be filed at this Facility such that they can be cross-referenced back to the other Detrex facility that shipped the material. The results will become part of this Facility's operating record.

For wastes not originating from another Detrex facility, containers of waste are removed from the transport vehicle, up to a volumetric capacity of 550 gallons, and are placed in the Staging Area in the Facility near the

Hazardous Waste Container Storage Area. Each container at this time is marked with a container number for the purposes of tracking. Shipping documents (manifest and land ban forms when required) are reviewed. The transporter will remain on-site until the analysis is complete and a signed copy of the manifest is provided to the transporter.

Discrete samples are obtained to perform the required analytical tests. The type of sample utilized for each test is specified in the testing procedure.

Attachment C-5 provides the parameters for screening each type of waste. Results of the analysis are recorded on forms similar to those found in Attachment C-8. Waste Screening is performed in two stages. The first stage of screening will consist of: visual and olfactory observation (C-2b(4)) and ignitability. The second stage will include any required testing for compatibility (C-2b(3)), paint filter, water reactivity, pH, or reactive cyanide, as outlined in attachment C-5. Additional testing, as noted in C-2d(4), will be performed if deemed necessary by Detrex. Since any additional testing performed by Detrex is non-mandatory, such testing will not preclude the ability of Detrex to accept the waste and place it into the storage area.

The Profile sheet is compared to information obtained from: lab results, sample observations, Manifest, and the Land Ban Forms. A complete record of all-sampling, unusual observations, and analytical work is placed in the operating files at the Facility.

Analytical testing may be done in the on-site laboratory or at another laboratory. The testing procedures described in the following sections are followed by either laboratory. A laboratory Quality Assurance Project Plan (QAPP) has also been developed to ensure the reliability and accuracy of analytical results.

Containers that fail analysis will have a rejection marking placed on the container near the hazardous waste marking. Rejected drums will be segregated from other containers and grouped in areas within the staging areas shown in Attachment D-1. These containers will either be rejected, returned to the generator, sent to another TSDF under the consent of the generator, or reprofiled to allow acceptance.

In the event a waste stream is unacceptable, the manifest is not signed and the original waste generator is contacted to determine appropriate handling of the rejected waste. The waste would be handled as outlined in Waste Rejection Procedure under Section C-2d(5). In the event that an entire waste stream indicates the wastes are unacceptable as profiled and manifested, but the waste can be accepted by the Facility, the generator would be

contacted and the procedure under C-2a(5) followed. Rejection of partial loads of waste also follows the procedures under C-2a(5).

C-2d(3) Waste Compatability

Another important aspect in the management of hazardous waste is waste compatability.

To prevent the possible mixing of incompatible wastes in the event of release Detrex will follow the following procedure:

- 1. Upon acceptance, mark the reactivity group number(s) (RGNs) of the material on each DOT container near the hazardous waste marking;
- 2. Post the chart contained in Attachment F-2 as a reference guide to determine compatibility of different waste streams. Use the chart prior to placing any new RGN into the storage area.
- 3. Post each RGNs present within a given storage area or use a computer tracking system to record and generate a list of RGNs in each containment area.
- 4. If this system indicates a potential incompatibility problem between the wastes already in a given storage area and newly accepted wastes to be placed into the storage area, then an alternate storage area will be sought or incompatible waste(s) within a given storage area will be moved to another area.

If the materials already in the containment areas, or staging area are incompatible with the incoming waste, then the waste will not be off-loaded. In this case the waste in the storage area will be shipped out to make room for the incoming waste, or the incoming waste will either be shipped back to the generator or to another facility licensed to accept the waste.

C-2d(4) Additional Testing

There may be cases when Detrex feels that additional testing may need to be performed. All results of additional testing will be recorded on the lab sheet and become part of the facility records for that load of waste.

Examples of when additional testing is needed are: a multi-layered waste and the profile indicates a homogeneous material, or if the material is

listed as solid but contains free liquids. Another example of when additional testing may be need is when Facility Personnel notice unusual odors associated with a waste stream.

The presence of unusual visual indicators or odors may not in and of themselves be enough to require additional testing of a material. One example of such an occasion when additional testing would not be needed is when the odor indicates a waste is a mixture of chlorinated solvents. While this would not necessitate the need to reject the material, it may create the need for better characterization. Under such conditions the Facility may perform additional testing, which could include the use of a GC. The testing will be performed on individual samples. When a number of containers have the same physical characteristics, an individual sample will be taken and tested from at least 10% of the containers. The generator will be contacted to complete the necessary paperwork which may include the generation of a new profile sheet.

C-2d(5) Discrepencies & Waste Rejection Procedure

The facility will compare all screening results to the parameters and information provided from the generator in the profile sheet. In the event the screening indicates that the waste does not match the profile/characterization, the waste may be rejected. The following procedure will be followed to determine if the Facility can accept the waste. Detrex will follow the rejection procedures for containers of hazardous waste based on MDEQ's requirements. When more stringent requirements exist, Detrex will follow the more stringent procedures. The following outlines the basic steps taken in determining whether or not a load is rejected. In all cases the transporter remains on site until the load is accepted, by signing the manifest, or rejected.

In the event that screening indicates that a particular waste stream is potentially unacceptable, the Facility may reload this material after initial screening onto the truck to allow for additional material to be brought into the staging area. Facility personnel will temporary isolate these containers in the staging area as long as there are no compatibility issues and total facility capacity of 13,750 gallons is not exceeded.

LOAD ACCEPTANCE

1) The generator/broker is contacted to discuss the discrepancies identified during the screening and/or testing process.

2) If it is determined that the discrepancies can be resolved, and the Facility has previously approved the waste stream, they are noted on the manifest and the waste is transferred to an appropriate storage area.

- 3) If a new Profile Sheet is required to accept the waste, for a new waste stream or for an existing waste stream, the generator will be requested to fax a copy of the Profile Sheet to expedite the process of waste acceptance.

 Discrepancies would be noted on the manifest.
- 4) If it is determined that the discrepancies cannot be resolved, and that the waste stream differs from the pre-approved waste, but is acceptable under the Facility's license, approval will be obtained from the generator to modify the manifest to accurately describe the waste shipped to the Facility. A discrepancy will be noted in the discrepancy box of the manifest. The generator will also be required to complete a Profile Sheet for the new waste stream.

To expedite this process, the generator will be required to authorize Detrex to modify the manifest to correctly reflect the waste stream(s). While waiting for this authorization the waste will either be held in the staging area or be placed back onto the truck until the required approval is received. The transporter will remain on site until the manifest is signed.

REJECTED LOADS

In the event that all or part of the waste is determined not to be acceptable through the screening process or other conditions noted by the Facility, the generator will be contacted. Detrex will follow the MDEQ requirements for partial rejection of a shipment of Hazardous Waste. However, should the sending state have more stringent rules, the more stringent rules will be followed.

In the event of a total load rejection, the generator would be contacted. MDEQ's requirements for a rejected load, would be followed. This may include modifying the manifest to allow the waste to be transferred to another TSDF, as requested by the generator, or to return the waste to the generator. In either case, the Facility would retain the TSDF portion of the manifest, or a Xerox copy of the manifest, for their records.

C-2e ADDITIONAL REQUIREMENTS FOR WASTES GENERATED OFF-SITE [40 CFR 264.13(b)(5) and (c), 264.73(b)]

As noted in Section C-2, the following requirements are in place for off-site waste generators.

The Facility requires, as part of their acceptance program, that the generator complete a Profile Sheet. If the Facility is informed, or has reason to believe that a waste stream has been altered, the generator is requested to complete a new Profile Sheet reflecting these changes. Each new Profile Sheet is reviewed to characterize the waste stream and to determine if the waste stream can continue to be accepted. If, upon evaluation of the Profile Sheet, it is determined that analytical testing data is required to determine acceptability, the necessary analytical tests are performed by the generator, a Detrex Laboratory, or an outside laboratory.

Additionally, as an on-going acceptance assessment, the generator is required to submit a new Profile Sheet, or sign a waste recertification statement/letter on an annual basis.

C-2f ADDITIONAL REQUIREMENTS FOR IGNITABLE REACTIVE/OR INCOMPATIBLE WASTES [40 CFR 264.13(b)(6), 264.17]

C-2f(1) Ignitable Wastes

Precautions taken by the Facility to prevent ignition of ignitable wastes include separation and protection of ignitable waste from ignition sources and the use of non-sparking tools when handling or sampling. Warning signs with the legend 'No Smoking' are also posted conspicuously in the area designated for handling and storage of ignitable waste.

C-2f(2) Reactive Wastes

The Facility does not handle reactive wastes. As detailed in Section C-2b, tests are performed as necessary on incoming wastes to ensure that reactive wastes are not inadvertently accepted.

C-2f(3) <u>Incompatible Wastes</u>

The Facility handles all permitted waste types such that incompatible waste types are segregated from the moment they are received at the Facility. Incompatible wastes are subsequently handled and stored separately. Incompatible waste types have been determined for all proposed and current waste codes handled at the Facility in accordance with the USEPA guidance document *A Method for Determining the Compatibility of Hazardous Waste*,

EPA-600/2-80-076, April 1980. An explanation of compatibility determinations is included in Section F-5.

Secondary containment areas will separate potentially incompatible wastes and prevent contact should one or more containers fail. Prior to acceptance of a waste stream, the compatibility of that waste with other currently stored waste types will be evaluated as noted above. Special attention will be given to those waste types that have been determined to be incompatible with a substantial number of other waste types. Waste groups will not be accepted until a secondary containment area, containing only wastes that are compatible with the subject waste group, is available.

In addition to the systems noted above, the Facility will institute the following to help insure that potentially incompatible wastes are not inadvertently stored in the same storage area:

- 1. Follow the requirements listed in Section F-5b and F-5e;
- 2. Upon acceptance, mark the reactivity group number of the material on each DOT container;
- 3. Post the chart contained in Attachment C-3 to serve as a reference guide;
- 4. Determine that only compatible materials are placed in the same hazardous waste storage area; and
- 5. Verify prior to placing any waste in the storage area that there is no potential for incompatibility.

3. Have the generator send a copy of the form via facsimile to the Facility with the complete and correct information on the form. The facsimile copy will be held as would an original in the files.

A copy of each LDRF is retained at the Facility for the retention period required under 40 CFR 268.

Should Detrex Corporation ship LDR wastes from the Facility it will complete the necessary notification and certifications (i.e. LDRFs) to accompany the waste shipment off site. In many cases, these LDRFs will be generated based on the original generator's knowledge of the waste, and the testing and profiling information used in the initial characterization of the waste. In the cases where there may be a question regarding the level of a constituent, or if one is present, analytical testing may be conducted.

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C-3a(1) Spent Solvent And Dioxin Wastes
[40 CFR 264.13(a)(1), 268.2(f)(1), 268.7, 268.30, 268.31]
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Analytical, generator process knowledge, or categorical streams will be used to determine the presence of spent solvent wastes (F001, F002, F003, & F005). Generator process knowledge will be documented on the Waste Material Profile Report and LDRF. The LDRF will provide additional information regarding the appropriate treatment standards for the waste and whether it has already been treated to the appropriate standards.

Dioxin wastes (F020-F023; F026-F028) are not accepted at the Facility.

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C-3a(2) <u>Listed Wastes</u> [40 CFR 264.13(a)(1), 268.7, 268.33, 268.34, 268.35, 268.36, 268.41, 268.42, 268.43]
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There are two methods that a generator can use to provide documentation regarding the constituents present in the waste stream.

- 1. Perform a one-time analysis of the waste stream including total metals or TCLP testing for underlying constituents, if the generator has not already performed these tests; or
- 2. Use defensible generator knowledge of the waste stream providing raw materials used and information on the process generating the waste.

C-3a(3) Characteristic Wastes
[40 CFR 261.3(d)(1), 264.13(a)(1), 268.7, 268.9, 268.37, Part 268
Appendix I, Part 268 Appendix IX]

One of the methods noted in Section C-3a(2), will be used to determine whether characteristic wastes meet the applicable treatment standards, or to demonstrate that the waste has been treated by the appropriate specified treatment technology. In addition, the generator's process knowledge or analytical data, if available, will be used to identify the underlying hazardous constituents that are expected to be present in wastes. The generator's process knowledge and analytical data will be documented on the Profile Sheet and LDRF.

C-3a(4) Waste Mixtures and Wastes with Overlapping Requirements [40 CFR 264.13(a), 268.7, 268.41(b), 268.43(b), 268.45(a)]

Generator process knowledge and analytical data, whenever deemed necessary, will be used to demonstrate that waste mixtures and wastes carrying multiple waste codes are properly characterized. Waste that carry more than one characteristic or listed Reactivity Group Numbers (RGNs) will be identified with a number for each characteristic.

- C-3b NOTIFICATION, CERTIFICATION, AND RECORDKEEPING REQUIREMENTS
 [40 CFR 264.73, 268.7,268.9(d)]
 - C-3b(1) Retention of Generator Notices and Certifications
 [40 CFR 268.7(a)]

Detrex Corporation will retain a copy of all notices, certifications, demonstrations, data, and other documentation regarding land disposal restrictions as required by Act 451 Part 111.

C-3b(2) Notification and Certification Requirements for Treatment Facilities
[40 CFR 268.7(b)]

No chemical or physical treatment of wastes is conducted at this site. All wastes are eventually transported off site to a properly permitted facility. Land Disposal Restrictions Forms are prepared as appropriate.

C-3b(3) Notification and Certification Requirements for Land Disposal Facilities [40 CFR 268.7(c)(1)]

Not applicable to this Facility.

C-3b(4) Waste Shipped to Subtitle C Facilities [40 CFR 268.7(a), 268.7(b)(6)]

All waste shipments from the Facility to a permitted TSDF have the appropriate notifications and certifications. As described in Section C-3b(2), the notifications/certifications will be prepared by Detrex Corporation from the information provided by the original generator.

C-3b(5) Recordkeeping

[40 CFR 264.73, 268.7(a)(5), 268.7(a)(6), 268.7(a)(7), 268.7(d); ACT 64-299.9608(4) & 299.9610(3)]

Detrex maintains a Facility Operating Log in accordance with 40 CFR 264.73. The operating log primarily consists of a waste tracking system (i.e., computerized) which is updated daily to accurately reflect the inventory of wastes received, processed and/or transported off-site.

Copies of all necessary notifications and certifications as well as relevant inspection forms and monitoring data are also maintained on file at the Facility. Files will be maintained for a minimum 3 years (i.e., inspection records), 3 years (i.e., LDRFs), or until closure (i.e., shipments of waste to the facility).

Since this Facility no longer processes hazardous wastes, there is no need to provide monthly reports to the director. In the event that a significant manifest discrepancy is discovered (i.e., variation in one piece count or misrepresentation of the type of waste - corrosive rather than flammable), which cannot be resolved with the generator or transporter within 15 days of receipt, Facility personnel will submit to the director and regional administrator a letter describing the discrepancy and all attempts to reconcile the discrepancy. The letter will include a copy of the manifest or shipping document.

C-3c REQUIREMENTS PERTAINING TO THE STORAGE OF RESTRICTED WASTES [40 CFR 268.50]

C-3c(1) Restricted Wastes Stored in Containers [40 CFR 268.5(a)(2)(i)]

Section D-1 of this license application describes the procedures followed by Detrex to manage containerized hazardous wastes at the Facility. Many of the wastes managed at the Facility are restricted wastes. In particular, all containers are clearly marked to identify their contents and date of receipt at the Facility.

Secondary containment storage areas 7 & 8 will not be utilized for the storage of Hazardous Wastes until MDEQ has accepted certification denoting the new curbing and coating have been properly installed.

D-1a(3)(b) Containment System Drainage [40 CFR 270.15(a)(2), 264.175(b)(2)]

Since there is no secondary containment drainage system, spills will be removed as described in paragraph D-1a(3)(e) as soon as practical after discovery.

In order to prevent direct contact between containerized hazardous wastes and standing liquids, the lower level of containers are placed on pallets to elevate them off the floor.

D-1a(3)(c) Containment System Capacity [40 CFR 270.15(a)(3), 264.175(b)(3)]

The calculations and volumes for each secondary containment area are provided in Attachment D-7. The largest DOT container to be stored in any one of the container storage areas is a 550-gallon steel tote.

The proposed hazardous waste secondary containment systems as shown in Attachment D-2 provide the following secondary containment capacities (see Attachment D-7):

Containment Storage Area #7: 17.3% of total volume (3,520 gallons)

110.6 % of largest container (550-gallon tote)

Containment Storage Area #8: 17.3 % of total volume (3,520gallons)

110.6 % of largest container (550-gallon-tote)

Containment Storage Area #9: 26.1 % of total volume (5,830 gallons)

(& Containment area #29) 199.3 % of largest container (5,000-gallon tank)

Containment Storage Area # 11 16.1 % of total volume (3,520 gallons x 2)

97 % of largest container (550 gallon-tote)

Therefore, the minimum secondary containment capacity requirement (i.e., 100 percent of largest container or 10 percent of total volume) is satisfied for the waste storage capacity for each of the secondary containment areas.

00-MI D

It should be noted that secondary containment area 9 will utilize the containment volume of the entire facility minus structures such as the lab, boiler room, ramps and containment areas 1 through 3.

D-1a(3)(d) Control of Run-on [40 CFR 270.15(a)(4), 264.175(b)(4)]

Run-on into the interior secondary containment system is eliminated by the building structure and by secondary containment structures. The Facility is NOT located within the 100-year Flood Plain. Thus, run-on cannot enter the hazardous waste containment storage areas or the staging areas as a result of normal precipitation or flooding.

Run-on protection is provided in container area number 11 by the trailer itself. The trailer is elevated approximately 4 feet off of the ground and as such there is no chance for flooding from precipitation.

D-1a(3)(e) Removal of Liquids from Containment System [40 CFR 270.15(a)(5), 264.175(b)(5)]

The composition of a spilled material is easily determined since all containers are marked and labeled to indicate their contents. If an inspection of a spill area does not clearly define the source of the spilled material, the containers can be further examined to determine if any container has less than its expected volume. If the visual examination does not identify the source of the release, a sample of the material will be obtained when sufficient volume exists. The containers may also be moved within the container storage areas to provide better visual inspection and room to facilitate the cleanup.

The containers within the secondary containment areas are separated by adequate aisle space to allow for routine inspection. Therefore, minor leaks or spills are easily detected and removed with absorbent material or other suitable methods, for subsequent disposal at a permitted facility. Section G-4e of the Contingency Plan provides further details of the procedures to be followed to clean spilled materials. In the unlikely event that the spill cannot be controlled in this manner, the procedures listed in the Contingency Plan would be implemented. It is considered very unlikely that spilled material will overtop a secondary containment area based on the secondary containment volumes provided (see Section D-1a(3)(c)). All spills will be cleaned up by Facility personnel within 24 hours of discovery, wherever possible. Outside independent agencies/contractors may be used as deemed necessary by the Emergency Coordinator.

00-MI D PAGE: 12

F-4 PREVENTATIVE PROCEDURES, STRUCTURES, AND EQUIPMENT [40 CFR 270.14(b)(8)]

F-4a LOADING / UNLOADING OPERATIONS [40 CFR 270.14(b)(8)(i)]

The unloading of containerized hazardous wastes occurs at the middle overhead door on the east side of the building. The door of the loading area is diked with a concrete ramp to maintain secondary containment while allowing for movement of containers. Containerized wastes are unloaded and placed in the staging area pending screening as per the waste analysis plan (Section C).

Containers of hazardous waste are primarily transported into and about the warehouse by a forklift. Hand trucks and other material handling practices also allow for movement of DOT containers inside the hazardous waste storage areas.

All loading / unloading operations are conducted under the supervision of Detrex personnel and the area used for unloading is inspected at the conclusion of unloading operations to ensure no spillage has occurred. In addition, the transport vehicle and the loading/unloading area are inspected immediately following a transfer to ensure all wastes have been removed and no spillage has occurred during movement of the waste.

F-4b RUN-OFF CONTROL [40 CFR 270.14(b)(8)(ii)]

The hazardous waste container storage areas are located within an enclosed building or within secured trailers that are closed during non-business hours. This prevents accumulation of run-on waters in the hazardous waste storage areas. As presented in Section B of this operating license application, surface runoff is directed away from the building structure in all areas except along a portion of the east wall. A 12-inch square, 6-inch deep sump is located within the concrete loading/unloading area to provide runoff control. The accumulated runoff is visually inspected. If the water meets the conditions for discharge, it is transferred into the municipal sanitary/storm sewer system. If the water fails to meet discharge requirements it will be collected and containerized for off-site disposal in accordance with Federal, State and local regulations. A 12-inch diameter, 6-inch deep catchbasin is also located within the Flammable Storage Area (#11). Water collected from this area is inspected prior to discharge.

00-MI -F. PAGE: 12

Date: 08/07/0 Revision: 00-3 Page: G-19

ATTENTION! REPORT TO THE PRIMARY/ SECONDARY DESIGNATED AREA AS THERE IS A FIRE/SPILL/EXPLOSION/ETC. [DENOTE THE AFFECTED AREA IF APPLICABLE].

Once outside the building, employees will assemble at the primary or alternate meeting area or other designated area. The EC or the alternate will then notify the proper emergency response teams. The EC, based on this assessment, may deviate from established procedures in order to effectively and safely respond to emergency situations.

G-8 REQUIRED REPORTS

[40 CFR 264.56(j)]

As required, any emergency event requiring implementation of the Contingency Plan will be reported in writing to the appropriate Regional Administrator and the director within fifteen (15) days of the event. This report will, at minimum, contain:

- 1. Name, address, and telephone number of the owner or operator;
- 2. Name, address, and telephone number of the Facility;
- 3. Date, time, and type of incident (i.e., fire, explosion);
- 4. Name and quantity of materials involved;
- 5. The extent of injuries, if any;
- 6. The assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- 7. Estimated quantity and disposition of recovered material that resulted from the incident.
- 8. As required, for any release that has reached the sewer drains, a written report shall be submitted within five days to the DWSD Industrial Waste Control Division.

The EC or a member of the Risk Management Department of Detrex Corporation will submit, and retain on file, reports to the appropriate agencies and all applicable information relevant to the event for which the Contingency Plan was implemented.

The EC or a member of the Risk Management Department of Detrex will also inform the appropriate departments, agencies, and authorities that cleanup is complete before operations at the Facility resume.

Detrex will place in the operating record all reports of any incident that requires implementing the Contingency Plan.

00-MI-G PAGE: 19

Date: 09/28/00 Revision: 00-3

ATTACHMENT G-2 EMERGENCY RESPONSE AGENCIES / ORGANIZATIONS

NAME

ADDRESS

PHONE NUMBER

Detroit Police Department	Commanding Officer	911
Betreve x enec Beparament	2 ND Precinct	(313) 596-5200 (general)
	13530 Lesure	(cre) by a beat (general)
	Detroit MI 48227	
Detroit Fire Department		911
2 care and 2 cput times.	Engine # 30	(313) 596-2900 (general)
	16600 Meyers	(615) 696 2966 (general)
	Detroit MI 48235	
Grace Hospital	Ms. Vernell Williams	(313) 966-3300
Grace Hospital	Director of Operations	(313) 300 3300
	Sinai-Grace Hospital	
	Administration	
	6071 W. Outer Drive	
	Detroit MI 48235	
National Dames - Canton	Detroit Wii 48233	1 900 424 9902
National Response Center	24001 N	1-800-424-8802
Detrex Corporation Risk	24901 Northwestern Hwy., 500	(248) 358-5800 (main)
Management Group	Southfield MI 48075	(248) 799-3820 (24 hr.
		emergency phone #)
Detroit City LEPC	Niles Sexton	313-596-2906
(PEAS) Michigan Pollution		1-800-292-4706
Emergency Altering System		
SERC		517-373-8481
MDEQ, Waste Management	MDEQ,	(313) 392-6500
Division – Detroit Office	300 River Place, Suite 3600	
	Detroit, MI 48207	
Detroit Water & Sewer	303 South Livernois	(313) 224-4775
Department (DWSD)	Detroit MI 48209	
System Control Center		
Emergency spill Clean-Up		
Companies		
Marine Pollution Control	8631 W. Jefferson	(313) 849-2333
	Detroit MI 48209	(800) 521-8232
K & D Industrial Services,	6470 Beverly Plaza	(734) 729-3550
Inc.	Romulus MI 48174	

October 17, 2000

VIA: Certified Mail
Ms. Vernell Williams,
Director of Operations
Sinai-Grace Hospital Administration
6071 W. Outer Drive
Detroit MI 48235

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Ms. Williams:

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

In order to verify your receipt of the Plan, please sign the attached Acknowledgment Form and return it in the enclosed envelope. Please feel free to contact me should you have any questions regarding the revised Contingency Plan.

Sincerely,

David Craig - CHMM, CET Manager of Environmental and Safety Compliance

cc:

MDEQ, Hazardous Waste Section Facility
File

HAZARDOUS WASTE TSDF CONTINGENCY PLAN ACKNOWLEDGEMENT FORM

I, Vernell Williams of Sinai-Grace Hos	pital Administration, acknowledge receipt of			
Detrex Corporation's Contingency Plan Dated	August 24, 2000. I have reviewed the document			
and understand Detrex's need for my company	as an Emergency Responder/Organization in the			
event that such services are needed. I further acknowledge that this Plan has been reviewed				
with key response personnel in my company ar	nd that the document is being maintained on file			
for future reference.	· ·			
Signature of Emergency Responder				
	D '10 ' CYN O (CDT			
D. A. N. and and Title	David Craig, CHMM, CET			
Print Name and Title	Mgr. Environmental & Safety Compliance			
Date	Date			

October 17, 2000

VIA: Certified Mail
Mr Glenn Hendrix,
Emergency Coordinator
Detroit Fire Department
Emergency Management Division
250 W. Larned

Detroit MI 48226

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Mr Hendrix:

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

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					•	
Signature of Emergency Responder						
	D II G I GVD D (OPT					
	David Craig, CHMM, CET					
Print Name and Title	Mgr. Environmental & Safety Compliance					
Date	Date					

October 17, 2000

VIA: Certified Mail Commanding Officer Police Department 2ND Precinct 13530 Lesure

Detroit MI 48237

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Sir:

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for future reference.		· ·		
Signature of Emergency Respond	ler			
		Devil Corie CIDAN CET		
Print Name and Title	 	David Craig, CHMM, CET Mgr. Environmental & Safety Compliance		
Fint Name and Title		wgi. Environmental & Salety Comphance		
-				
Date		Date		

October 17, 2000

VIA: Certified Mail Mr. Mike Snyder, VP of Administration Marine Pollution Control 8631 W. Jefferson

Detroit MI 48209

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Mr. Snyder:

Detrex Corporation has updated its Contingency Plan according to the requirements of Act 451, part 111. As a listed Emergency Responder / Organization Detrex Corporation is providing you with a copy of the latest version of our Contingency Plan.

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with key response personnel in my company	and that the document is being maintained on file
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Signature of Emergency Responder	
	David Crain CHMM CET
Print Name and Title	David Craig, CHMM, CET Mgr. Environmental & Safety Compliance
Time rane and Time	ingl. Environmental & Salety Comphanic
Dota	Date

October 17, 2000

VIA: Certified Mail Mr. Ken Markey, Branch Manager K & D Industrial Services, Inc. 6470 Beverly Plaza

Romulus MI 48174

Re: Contingency Plan.

Detrex Corporation 12886 Eaton Av. Detroit MI 48227

Dear Mr. Markey:

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	David Craig, CHMM, CET
Print Name and Title	Mgr. Environmental & Safety Compliance
Date	Date
	

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Print Name and Title	David Craig, CHMM, CET Mgr. Environmental & Safety Compliance						
Data	Date						

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Print Name and Title	Mgr. Environmental & Safety Compliance				
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October 17, 2000

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MDEQ, Hazardous Waste Section Facility File

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for future reference.							
Signature of Emergency Responder							
Signature of Emergency Responder							
	David Craig, CHMM, CET						
Print Name and Title	Mgr. Environmental & Safety Compliance						
Date	Date						
Date	Date						

Date: Revision: 08/24/00

: 00-2

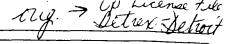
Attachment I-5 CLOSURE COST ESTIMATE (2000 \$)

Item	Activity		Estimat	ed Cost
A.	INVENTORY REMOVAL			
	• Transfer container contents to	bulk tanker (1 1/2 day)		2,400
	S	ubtotal A	\$	2,400
	SECONDARY CONTAINMENT	he interior hazardous wastes		
sto	orage areas (7, 8, 9, 29), flammable loading unloading areas - 1/2 • Clean interior secondary contains	day)		\$800
	<u>-</u>), and the loading/unloading areas.	<u>\$</u>	3,200
	Subtotal B		\$	4,000
C.	TRANSPORTATION AND DIS	POSAL		
	• Bulked liquid waste disposal	<u> </u>	\$	23,375
	Washwater disposalContainerized solids/sludges	4,100 gal @ \$0.75/gal 10 drum @ \$255/drum		3,075 2,550
	S	ubtotal C	\$	29,000
D.	SAMPLING AND ANALYSIS			
	TechnicianAnalytical-	2 days @ \$550 water rinse (16) @\$850 ea. soil (4) @\$900 ea.	\$	1,100 13,600 3,600
	S	ubtotal D	\$	18,300

Date: Revision: 08/24/00 00-2

Attachment I-5 CLOSURE COST ESTIMATE (2000 \$)

Item	Activity		Estimate	ed Cost
E.	OVERSIGHT/CERTIFICATION	ON		
	Oversight 6 days @ \$675Certification Report L.S.		\$	4,050 3,500
		Subtotal E	\$	7,550
		Subtotal Administration (10%) Contingency Cost (15 %)	\$ \$ <u>\$</u>	61,250 6,125 9,187.50
		TOTAL	\$	76,562.5
		(2000\$)	\$	80,086.74







XC: Dlayer

P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

September 1, 2000

Ronda Blayer MDEQ, Waste Management Division 608 W. Allegan John Hanna Building, 1st Floor Lansing MI 48933

VIA: US Mail & Facsimile

RE: Part B Permit Application

Detrex Corporation- Solvents Division

12886 Eaton Ave.
Detroit—MI 48227

EPA ID # MID 091 605 972

Dear Mrs. Blayer:

In speaking with John McCabe today it appears that an error was made when copying Section D such that you only received the odd pages. As such I am supplying you with 8 new copies of Section D of the application. I hope this has not caused any inconvenience on your end.

SEP 0 6 2000

air Mauson

If you should have any questions, or need additional information please feel free to give me a call.

Sincerely,

David Craig, CHMM, CET

Manager of Environmental and Safety Compliance

CC:

File

Facility

Enclosure:

8 copies Section D of Application

SEP 0 6 2000

SECTION D

. . .

PROCESS INFORMATION

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	D-1a(2)	Container Management Practices [40 CFR 264,173]	
	D-1a(3)	Secondary Containment System Design and Operation	
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ATTACHMENTS

ATTACHMENT D-1	EXISTING FACILITY PLAN
ATTACHMENT D-2	PROPOSED FACILITY PLAN
ATTACHMENT D-3	DESIGN DRAWINGS OF STRUCTURAL RENOVATIONS
ATTACHMENT D-4	DOT CONTAINER SPECIFICATIONS
ATTACHMENT D-5	TYPICAL HAZARDOUS WASTE CONTAINER MARKING
ATTACHMENT D-6	COATING SPECIFICATIONS AND MANUFACTURERS APPLICABILITY DETERMINATION
ATTACHMENT D-7	SECONDARY CONTAINMENT VOLUME CALCULATIONS
ATTACHMENT D-8	SCHEDULE OF INSTALLATION

00-MID PAGE: 3

SECTION D

PROCESS INFORMATION

The hazardous waste management operations at this Detrex Corporation Facility (Facility) will involve container storage (process code S01).

In order to store the new proposed waste codes at the Facility, the building will be upgraded. The upgrading will include construction of new internal concrete curbing. The curbing will provide separate secondary containment for each of the hazardous waste container storage areas and the primary staging/storage area including the distillation system.

Attachment D-1 presents an existing Facility plan. Attachment D-2 presents a proposed Facility plan illustrating the modifications.

Attachment D-3 presents a set of design drawings, which detail the proposed structural renovations to the existing Facility building.

D-1 CONTAINERS

[40 CFR 270.15, 264.170 THROUGH 264.178]

Hazardous wastes (wastes) are received at the Facility in Department of Transportation (DOT) approved shipping containers. Before scheduling any pickup of Wastes from generators, Facility Personnel will verify the amount of waste currently on hand to determine if the Facility has the necessary capacity to accept the wastes. This may be done via a visual inspection or by a container tracking system. In cases where the potential exists for total capacity to exceed the 13,750 gallons total allowable storage/staging of hazardous waste, arrangements will be made to ship waste off site to allow for acceptance of the new wastes.

Containers, upon their arrival at the Facility, will initially be placed in a staging area for screening in accordance with the Waste Analysis Plan (WAP - Section C), sampled, and then transferred to the appropriate hazardous waste container storage area once they have passed analysis. The <u>transporter will remain on-site</u> until the screening is complete and a signed copy of the manifest is provided to the transporter.

Prior to transferring containers from a transport truck to a staging area or from the staging area to the storage area, the compatibility groups associated with each container of waste will be reviewed with any containerized waste already present in the area to ensure potentially incompatible wastes are not placed together. Facility personnel will use the compatibility chart found in Attachment F-2 to verify compatibility. When drums are unloaded to the designated storage area only materials profiled as compatible with each other will be placed in this area. Once the containers have been approved, they will be moved to a storage area with compatible wastes. The locations of the modified proposed container storage areas and the staging areas are shown on the Facility plans provided in Attachment D-2.

The procedure noted above, and detailed in Section F-5b & F-5d, is designed to preclude the need for having designated storage areas. This review will include reviewing the reactivity group numbers of other materials (products and non-hazardous wastes) stored in the same secondary containment area.

Detrex has also reviewed the issue regarding a failed container and the aspect of providing the required protection from material squirting into an adjacent storage area. Detrex has revamped the configuration of the storage areas to allow at least 3 feet between the edge of adjacent hazardous waste storage areas 7 & 8 and between these areas and storage area 9. Based on past experience Detrex has found that failed containers holding free liquids are not able to project liquids if there is minor damage to the container. This is because closed containers that fail below the liquid line rapidly develop a vacuum when liquids leave the container. Projection from leaks that occur near the liquid / air interface of a container open to the atmosphere lack the necessary head pressure to project any distance. Therefore second level containers in the worst case will only project if punctured at the bottom of the container. Our experience has shown this squirting to be only an initial projection, and then a seeping since the container needs to take in air. For large holes the liquid flows out without projecting.

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Detrex is complying with the requirements of Subpart CC regarding container closures and meeting the requirement for initial inspection of containers. The daily inspection form will be used to denote any containers that fail the inspection required upon initially accepting the container.

D-1a CONTAINERS WITH FREE LIQUIDS

D-1a(1) Description of Containers
[40 CFR 264.171, 264.172, 270.14 (b)(2)]

The Facility only accepts and utilizes DOT-approved containers (49 CFR 178 Subparts D and H) for shipment and storage of hazardous waste. For a DOT-approved container to be accepted by the Facility, it must meet the following conditions:

- 1. The container must not have any leaks;
- 2. The container must not have excessive corrosion or rust buildup which could, upon handling, result in leakage;
- 3. The container MUST NOT be excessively dented such that the usable volume is significantly less than its DOT description (e.g. 55 gallons for drums, up to 550 gallons for totes, etc.);
- 4. The container must be properly sealed with a suitable bung and gasket; and
- 5. The container must be properly marked, labeled and manifested (according to Rule 299.9609).

In the event that an unsuitable container is received at the Facility, based upon the above criteria, the container may be accepted if it is over-packed or other precautionary measures are implemented (e.g., contents transferred to a suitable DOT approved container). Over-packing involves the placing of the unsuitable container, with its contents, into a larger DOT-approved container that is suitable for that particular waste. For example, a 55-gallon drum may be over-packed into a 75 or 85-gallon over-pack drum by lifting the 55-gallon drum via a forklift equipped with a sling or grappler and placing the drum into the over-pack container.

When the Facility delivers products using its own trucks, it is common practice to pick-up waste at the same time. Thus, Detrex drivers are able to check each container at this time to see that the criteria outlined above are met. In this case, containers not meeting the listed criteria will not be picked up.

D-1a(2) Container Management Practices [40 CFR 264.173]

To ensure that there is no spillage of hazardous waste during shipment from a generator's facility, each container must meet the requirements specified previously in Section D-1a(1).

The type of container the material will be shipped in will be as directed by the DOT (outlined in 49 CFR § 172, 173 and 178). Facility Personnel have access to the regulations, which specify the type of container that may be used. Columns 8b & 8c of DOT's Hazardous Material Table, found in 49 CFR Part 171 Subpart B, references information under Part 173 Subparts E & F regarding the types of containers that can be used. Since these regulations are constantly changing, Attachment D-4 has been provided to show how to determine the types of packages allowable under DOT's regulations rather than to provide a copy of the regulations themselves. All containers will remain tightly sealed while in the staging or storage areas and will only be opened when the waste material is to be sampled or transferred. For safety reasons sampling or transferring wastes in or out of a container will not occur while containers are stacked.

When containerized wastes are received at the Facility, they will be initially placed in the waste container staging area (Area 29 - see Attachment D-2). Containerized wastes will be sampled and analyzed according to the procedures discussed in Section C. Once the waste passes testing, the material will be moved to a suitable storage area. For storage area number 11, the staging area will be the transport vehicle itself. Containers will be placed at the end of the trailer and sampled. All other aspects of the screening process discussed in section C are applicable.

The following procedures will be followed to ensure that only compatible wastes will be stored/staged in any area of the Facility:

- 1. All waste shipments to the Facility will be scheduled prior to receipt of the shipment;
- 2. Per DOT compatibility shipping requirements, only compatible wastes will be scheduled to be received at the same time; and
- 3. The wastes will be evaluated in the staging area (see Attachment D-2), segregated according to EPA compatibility (see Section F) with compatible wastes, and then transferred to the appropriate hazardous waste container storage area within the Facility.

Containers may be handled within the building using a forklift or a hand drum truck. Containers being moved will always have properly secured lids and bungs, and care will be taken during the handling operations to protect against accidental damage to a container that could result in leakage or spillage while stored at the Facility. Should a container incur a breach of integrity, its contents will be transferred to a DOT approved container or over-pack container.

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Containers holding wastes that may not be compatible with each other will not be stored in the same container storage area.

Storage of non-bulk containers (capacity less than or equal to 119 gallons, as defined by the DOT), such as 55-gallon drums, will depend on the size and quantity of the containers. Small containers, such as a 5-gallon pail, may be stacked on top of each other (to a height less than or equal to that of a 55-gallon drum) and then placed on top of a pallet of drums or on another pallet of similar containers. Bulk DOT containers stored in the container storage area are typically designed with skid mounts to ease in their movement and stacking. As such, their handling will not create any problems.

All containers will be stored such that the markings and labels are visible from the aisle. A minimum aisle space of 24 inches will be maintained in Container Storage Areas. Non-Bulk containers in these areas may be stacked to a maximum of two layers high. It is noted that larger portable tank containers (i.e., totes up to 550-gallons) will not be placed on pallets since the container is constructed with support legs, which allow direct inspection for potential leaks. Only similar sized containers will be placed on the same pallet to ensure the stability when there is an overlying pallet. The inspection of the bulk and non-bulk DOT containers for deterioration such as leaks is discussed in detail in Section F-2.

In area 11, the containment trailers, the containers will be placed such that there will be two rows. One row is approximately 48 inches and will allow for two drums or one tote, while the other row will be limited to a row of drums. If pails are stored on the trailer, they may be stacked two high.

The following procedures are followed whenever the Facility is receiving and/or transporting hazardous wastes:

- 1. When Detrex Corporation acts as the transporter, it only accepts properly manifested, marked, and labeled shipments of hazardous wastes with the container meeting the conditions outlined in Section D-1a(1);
- 2. Only the waste types identified in Section C are accepted for storage within the Facility;
- 3. Shipments are recorded in the Facility Operating Log upon receipt at the Facility;
- 4. Containers are placed in the staging area and a sample is then obtained using the procedures established in the Waste Analysis Plan to screen the waste;
- 5. When waste is received at the Facility, the containers are sampled according to the procedures outlined in Section C-2d. Once the required screening analysis is complete the manifest is signed and a copy is given to the transporter in accordance with the regulations as found under 49 CFR § 172.205(d)(2) and (e)(1);

In the event the screening process determines that the material is not acceptable, the manifest will not be signed and the generator will be contacted. Based on this conversation, the Facility may direct the transporter to ship the waste back to the

generator or ship the waste material to an alternate permitted facility. In either case, shipment of the returned material will be handled in accordance with manifesting requirements as defined by MDEQ, 49 CFR 172.205, and if more stringent, the rejection requirements of other states. A discrepancy will be noted in the discrepancy section of the manifest, noting the reason for rejection.

If the waste is determined to be acceptable under the screening process, the generator will be forwarded a copy of the manifest within 30 days and a copy will be retained at the Facility for a period of at least 3 years.

- 6. The accepted container will be moved into an area with compatible materials.
- 7. Once the manifest is signed, indicating the screening of the waste has been completed, the transporter is released.

Hazardous waste containers are distinguished from virgin product containers by proper marking and labeling. Attachment D-5 provides a typical hazardous waste drum marking. Hazardous waste containers will be marked to identify their contents and to ensure that compatible wastes are stored in the appropriate areas.

D-1a(3) Secondary Containment System Design and Operation [40 CFR 270.15(a)(1), 264.175(a), 264.175(d)]

The secondary containment system consists of two units, an interior and exterior portion, and the containment trailers. These are:

- 1. Three separate interior container storage areas;
- 2. Containment trailers for storing flammable wastes; and
- 3. the loading/unloading area.

The interior secondary containment system consists of a concrete slab and curbing. For hazardous waste storage areas 7 & 8 portable ramps will be used to get over the secondary containment curbing in these areas. The curbing will be coated on the sides and top with a coating compatible with the wastes that may be potentially stored there. Cross-sectional details of the interior secondary containment systems, concrete dikes, are provided in Attachment D-3.

The movement of the containers to the storage areas may be accomplished using forklifts and hand trucks.

The Facility's maximum waste capacity is 13,750 gallons for storage areas 7, 8, 9, 11, and 29. Listed below are the maximum amounts of waste that may be stored in any one-container storage area at any given time.:

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Container Storage Area #7
Container Storage Area #8
Container Storage Area #8
Container Storage Area #9
Container Storage Area #9
Container Storage area 29)
Container Storage Area #11

7,040 gallons (128 x 55-gallon drums)

The design capacities are based upon 55-gallon drums, although totes up to 550-gallons may also be stored. A four-drum pallet measures 4 feet by 4 feet, which has the approximate dimension of a tote. Other sized containers or totes may be stored within any of the container storage areas, however the maximum capacity may not be exceeded.

To allow for flexibility, Detrex is opting to utilize variable storage capacity. Under this scenario, the amount of material that may be stored in any storage area is limited to its maximum storage as stated above, or that amount necessary to prevent the Facility from exceeding its maximum allowable storage of 13,750-gallons. As an example, if 64 drums were stored in area 7, the Facility would limit storage in other areas when necessary to prevent exceeding maximum capacity.

There are no floor drains in any of the secondary containment areas. In the event of damage to the curbing, any cracks will be cleaned out and repaired with the selected compatible, chemically resistant sealant.

The installation of new concrete curbing will be utilized to establish containment areas. The floor in the areas where the curb will be placed will be cleaned. The curbing, 2 to 6 inches wide and 3 ½ inches high, will tie into the existing floor via lag bolts. A bead of sealant will help form an impervious barrier between the floor and the new curb. After curing, a coating will be applied to the entire curb and the floor near the curb to complete the barrier. Certified drawings of this new curbing as well as existing curbing utilized in most of the facility are found in Attachment D-3.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids [40 CFR 264.175(b)(1)]

Following the installation of the new hazardous waste storage areas, the Facility will apply a selected impervious coating (ICO SuperGuard, Corra Ultra-Cote, or some other suitable coating after providing documentation to MDEQ of its performance standards). The specifications for ICO Super Guard coating is provided in Attachment D-6. The coating will provide containment for the constituents to be stored for at least 72 hours. Therefore once applied, the container storage areas will be impervious to the wastes stored.

Secondary containment storage areas 7 & 8 will not be utilized for the storage of Hazardous Wastes until MDEQ has accepted certification denoting the new curbing and coating have been properly installed.

D-1a(3)(b) Containment System Drainage [40 CFR 270.15(a)(2), 264.175(b)(2)]

Since there is no secondary containment drainage system, spills will be removed as described in paragraph D-1a(3)(e) as soon as practical after discovery.

In order to prevent direct contact between containerized hazardous wastes and standing liquids, the lower level of containers are placed on pallets to elevate them off the floor.

D-1a(3)(c) Containment System Capacity
[40 CFR 270.15(a)(3), 264.175(b)(3)]

The calculations and volumes for each secondary containment area are provided in Attachment D-7. The largest DOT container to be stored in any one of the container storage areas is a 550-gallon steel tote.

The proposed hazardous waste secondary containment systems as shown in Attachment D-2 provide the following secondary containment capacities (see Attachment D-7):

Containment Storage Area #7: 17.3% of total volume (3,520 gallons)

110.6 % of largest container (550-gallon tote)

Containment Storage Area #8: 17.3 % of total volume (3,520gallons)

110.6 % of largest container (550-gallon-tote)

Containment Storage Area #9: 26.1 % of total volume (5,830 gallons)

199.3 % of largest container (,000-gallon tank)

Containment Storage Area # 11 57.4% of total volume (7,040 gallons)

97 % of largest container (550 gallon-tote)

Therefore, the minimum secondary containment capacity requirement (i.e., 100 percent of largest container or 10 percent of total volume) is satisfied for the waste storage capacity for each of the secondary containment areas.

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It should be noted that secondary containment area 4 will utilize the containment volume of the entire facility minus structures such as the lab, boiler room, ramps and containment areas 1 through 3.

D-1a(3)(d) Control of Run-on [40 CFR 270.15(a)(4), 264.175(b)(4)]

Run-on into the interior secondary containment system is eliminated by the building structure and by secondary containment structures. The Facility is NOT located within the 100-year Flood Plain. Thus, run-on cannot enter the hazardous waste containment storage areas or the staging areas as a result of normal precipitation or flooding.

Run-on protection is provided in container area number 11 by the trailer itself. The trailer is elevated approximately 4 feet off of the ground and as such there is no chance for flooding from precipitation.

D-1a(3)(e) Removal of Liquids from Containment System [40 CFR 270.15(a)(5), 264.175(b)(5)]

The composition of a spilled material is easily determined since all containers are marked and labeled to indicate their contents. If an inspection of a spill area does not clearly define the source of the spilled material, the containers can be further examined to determine if any container has less than its expected volume. If the visual examination does not identify the source of the release, a sample of the material may be obtained when sufficient volume exists. The containers may also be moved within the container storage areas to provide better visual inspection and room to facilitate the cleanup.

The containers within the secondary containment areas are separated by adequate aisle space to allow for routine inspection. Therefore, minor leaks or spills are easily detected and removed with absorbent material or other suitable methods, for subsequent disposal at a permitted facility. Section G-4e of the Contingency Plan provides further details of the procedures to be followed to clean spilled materials. In the unlikely event that the spill cannot be controlled in this manner, the procedures listed in the Contingency Plan would be implemented. It is considered very unlikely that spilled material will overtop a secondary containment area based on the secondary containment volumes provided (see Section D-1a(3)(c)). All spills will be cleaned up by Facility personnel within 24 hours of discovery, wherever possible. Outside independent agencies/contractors may be used as deemed necessary by the Emergency Coordinator.

D-1b CONTAINERS WITHOUT FREE LIQUIDS

Most of the wastes to be stored at the Facility are liquid wastes. Solid wastes may also be accepted for storage or solids may be present with liquids inside waste containers (i.e., sludge).

Screening procedures for solid wastes are described in Section C-2. In the event visual evidence during sampling indicates the potential presence of free liquids within a container designated as a solid waste, a paint filter test may be conducted.

D-1b(1) <u>Test for Free Liquids</u> [40 CFR 270.15(b)(1)]

A paint filter test may be conducted on any wastes, which are to be accepted by the Facility and managed as "containers without free liquids"

D-1b(2) <u>Description of Containers</u> [40 CFR 264.171, 264.172]

DOT-approved containers identified in Section D-1a(1) may be utilized.

D-1b(3) Container Management Practices [40 CFR 264.173]

The containers will be managed in the same manner as described in Section D-1a(2).

D-1b(4) <u>Container Storage Area Drainage</u> [40 CFR 270.15(b)(2), 264.175(c)]

All container storage areas are enclosed within a single building or within the containment trailer. In addition, the procedures documented in Section D-1a(3)(b) are in place to insure containers are properly elevated except within the containment trailer.

D-1c SUBPART CC [40 CFR 264.1086]

The facility only accepts wastes in DOT approved containers. As such, Detrex meets the requirements for level 1 and level 2 controls. Facility personnel inspect each container upon its arrival at the facility to insure its structural integrity. Since the facility does not hold containers longer than one year there is no need for subsequent re-verification.

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If during the daily inspection of the containers, one is found to be in a condition likely to allow hazardous wastes to be released from the container, Detrex will make the first attempt at repairing the container within 24 hours of its discovery, transfer the contents to another compatible container, or over-pack the container. All attempts at repair or transfer will be completed within 5 days of initial discovery.

Typically, the Facility deals with hazardous wastes containing Volatile Organic Compounds (VOC) greater than 500-ppmbw concentration (at the point of generation). This is documented in the Profile Sheet completed by the generator prior to accepting the waste. In the event that the generator denotes that a hazardous waste contains less than 500 ppm VOC (at the point of origin), or the generator states that they have treated the waste, Detrex will request the generator to provide information of meeting the 500 ppmbw level or that they have properly treated the waste as required under 40 CFR 264.1083(b) Waste Determination Procedures For Treated Hazardous Waste.

Hazardous waste containers are inspected prior to acceptance to ensure they meet the criteria for acceptance. The containers are also inspected daily for signs of leaks or deterioration and to ensure the containers are properly marked and labeled. When a defect is detected for a container, its closure device, or its cover, Facility personnel will make note of the finding in the inspection and attempt repair on the container within 24 hours. If it is determined that repairs are not possible, or if the repair cannot be completed within 5 days, the Facility will either overpack the container or transfer the hazardous waste to a suitable container.

D-2 TANK SYSTEMS

[40 CFR 270.16; 264.191 through 264.194]

This section is not applicable as the Facility does not operate hazardous waste storage tanks

D-3 MANIFEST SYSTEM & REPORTING

[299.9608 & 299.9610]

Detrex accepts only properly manifested hazardous wastes for storage in this Facility and operates several licensed hazardous waste vehicles.

Upon receipt of a hazardous waste shipment at the Facility, the following procedures are followed:

- 1) The waste shipment paperwork (including manifest and land ban notification) are reviewed for completeness;
- 2) The wastes are sampled, in accordance with the WAP;

- 3) Waste screening is conducted to confirm the acceptability of the waste material;
- 4) Upon approval, the manifest is signed and dated;
- 5) Detrex retains the TSDF copy, and the transporter's copy of the manifest, in the event that they are also the transporter;
- 6) Within 30 days, a signed copy of the manifest is returned to the original generator, and
- 7) A copy of each manifest is maintained at the Facility for a period of at least three years.

Any discrepancies found in the manifest are appropriately noted as are steps taken to reconcile the discrepancy with the original waste generator. In the event a discrepancy cannot be resolved within 15 days, Detrex will submit to the director a letter describing the discrepancy, attempts to reconcile it, and a copy of the manifest.

D-4 RECORD KEEPING

[299.9609]

Detrex maintains an operating record within the office of the Facility. This operating record includes a copy of this Operating License Application and related correspondence. The operating record, including the information described below, will be maintained until closure of the Facility.

The operating record includes at a minimum the following:

- 1) A description and quantity of all wastes received for container storage, including cross-reference to appropriate manifest document number and dates of receipt;
- 2) A copy of all manifests signed by the Facility for at least 3 years;
- 3) Records and results of all waste analyses conducted including preliminary characterization, waste screening and annual waste re-characterization;
- 4) Copies of the Contingency Plan, acknowledgment agreements, and all required reports from the implementation of the Contingency Plan;
- 5) Inspection reports maintained on file for at least 3 years;
- 6) A record of any waste shipments rejected by the Facility:
- 7) Personnel training records for all former employers for at least 3 years after employment ends and records for current employees until closure;
- 8) A copy of the most recent closure cost estimate and a copy of financial assurance for closure:
- 9) Any related correspondence or reports submitted to, or received from, the Director relating to the TSDF operation; and
- 10) All monitoring, testing, or analytical data required by the operating license and notices to generators referenced in 40 CFR §264.12(b) will be maintained until closure.

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D-5 REPORTING

All required reports are prepared and submitted by Detrex Corporation. All reports will be signed and certified in accordance with the provisions of 40 CFR §270.11.

D-5a Biennial Report

Detrex will submit a biennial report by March 1 of each even numbered year to the Director of the Department. The report will be submitted on a form required and approved by the MDEQ and provide all information required on the form.

This information may include:

- 1) The EPA identification number, name, and address of the Facility;
- 2) The calendar year covered by the report;
- 3) A listing of EPA identification numbers for each hazardous waste generator from which wastes were received and for imported shipments, if any, the name and address of the foreign generator;
- 4) A description and quantity of each hazardous waste received during the year including EPA identification number of the generator;
- 5) The method of storage (i.e. container) for each hazardous waste; and
- 6) The most recent closure cost estimate under R 299.9702.

D-5b Unmanifested Waste Report

Detrex does not accept regulated wastes that are not properly manifested. Should unmanifested waste be sent to the Facility, the Facility will contact the generator to obtain a manifest when the material has already been profiled, or reject the material as noted in the WAP. Since unmanifested waste is not accepted, a report is not required.

D-6 LOCATION STANDARDS [R299.9603]

Since the TSDF for which this Operating License Application being submitted is an existing facility, and there are no new regulated treatment, storage, or disposal facilities, expansions or enlargements, the location standards do not apply. The only alteration to the Facility's operation is the secession of reclamation, which will not have any impact on the location standard.

Nevertheless, the Facility is not located in the vicinity of a fault, a floodway, a coastal area, nor over a sole-source aquifer, or near a public water supply. The waste management area

is located approximately 75 feet from the nearest property line (to the north), however it is over 130 feet to the nearest building (to the east). Based on the operation at the Eaton Avenue Facility, this is considered an adequate separation distance.

D-7 FACILITY DESIGN AND OPERATING STANDARDS [R299.9604]

The Facility is an existing TSDF and should therefore be exempt from the requirements of this rule.

Hazardous waste container storage areas 7, 8, & 9 are located within an enclosed building provided with adequate secondary containment. Containment area 11 is enclosed within trailers that provide secondary containment. These vehicles are located in a fenced area that is locked except when moving vehicles in or out of the area. Thus, run-on and run-off management systems are not required for the regulated units. Additionally, the outdoor loading/unloading area secondary containment system has been designed for the 24-hour 100-year rainfall event.

The Facility has been designed and is operated to prevent hazardous waste and hazardous waste constituents from escaping into the soil, surface water, groundwater, drains or sewers.

STATE OF MICHIGAN



JOHN ENGLER, Governor

REPLY TO

PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION

"Better Service for a Better Environment" HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

> INTERNET www deg state milus RUSSELL J. HARDING, Director

> > July 24, 2000

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Second Technical Review Notice of Deficiency for

Renewal Operating License Application

Detrex Corporation (Detrex), Detroit; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has completed a second technical review of the renewal operating license application for the above referenced facility, which was submitted pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The application reviewed consists of the original application submitted on December 27, 1996, and supplemental information submitted on January 5, 2000, February 16, 2000, April 10, 2000, May 3, 2000 (revisions based on the MDEQ's March 7, 2000 Notice of Deficiency (NOD)), June 7, 2000, June 15, 2000 (revisions based on the MDEQ's May 12, 2000 NOD), and June 29, 2000.

Based on this review, the WMD has determined that the application remains technically deficient. A list of the application deficiencies is enclosed. An itemized response to this letter and the enclosed NOD, along with revisions correcting the deficiencies, must be submitted to the Chief of the WMD by August 28, 2000. Failure to submit a technically adequate application within the specified time period is grounds for denial of the application pursuant to R 299.9518(2)(c).

When submitting revisions, please use the replacement page format for all revisions. Pages must be three-hole punched and numbered correctly so that they can be placed directly into the existing binders. The revision date must also be noted on replacement pages. Please be advised that it is not necessary to resubmit pages that have not been revised. The strike/underline format document that Detrex uses to highlight the revisions is very helpful. however, please confirm that all of the revisions are shown properly and that this format is removed from the copies to be inserted into existing binders. Eight collated sets of the revisions must be submitted such that they can be directly distributed to each person with an application.

The WMD recommends that a meeting be set between Detrex and the WMD to discuss the outstanding deficiencies. Please contact me once you receive this letter to set up the meeting.

If you have any questions, please contact me.

Sincerely,

Ronda R. Blayer Ronda L. Blayer

Environmental Engineering Specialist

Waste Management Division

517-373-9548

Enclosures

cc/enc: Mr. Nabil Fayoumi, United States Environmental Protection Agency

Mr. Thomas Shoens, Wayne County Department of Environment

Mr. Steve Buda, MDEQ

Mr. John McCabe, MDEQ

Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File

NUMBER 16	CATEGORY CONTAINERS	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION Not included in application	COMMENT Information required pursuant to 40 CFR 270.27 must be addressed in the application.
		270.15(e)		
17	AIR	504(16), 508(1)(b)	Not included in application	The application must be revised to address the requirements outlined in 40 CFR Part 264, Subpart CC.
		270.27		
18	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Not included in application	The application must be revised to include the results of investigations regarding the impact of the existing waste management units, including fill material underlying the facility, on the
	•	270.14(d)(3)		environment that have been conducted to date. The facility was required to conduct such investigations under the federal Hazardous and Solid Waste Amendments Permit that was issued concurrently with the facility's existing operating license. However, no information concerning these investigations is provided in the application.

DETREX CORPORATION

MID 091 605 972

HAZARDOUS WASTE MANAGEMENT FACILITY RENEWAL OPERATING LICENSE APPLICATION TECHNICAL REVIEW NOTICE OF DEFICIENCY

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION		COMMENT
1	FORM	508(1)(a)	Section A	Completeness issue.	
	05557510.4710.V	500/01			,
2	CERTIFICATION	508(3)	Not included in application	Completeness issue.	
		270.11(d)			
3	CERTIFICATION OF CAPABILITY	508(1)(d)	Not included in application	Completeness issue.	
4	HYDROGEO	504(1)(d), 508(1)(b) 506	Section E	Yet to be reviewed with re	espect to technical adequacy.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
5	HYDROGEO	504(1)(d), 506(1)(b), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
6	HYDROGEO	504(1)(d), 506(1)(c), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
7	HYDROGEO	504(1)(d), 506(1)(d), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
8	HYDROGEO	504(1)(d), 506(1)(e)(i), 508(1)(b) 270.14(b)(19)	Section E	Yet to be reviewed with respect to technical adequacy.
9	HYDROGEO	504(1)(d), 506(1)(e)(ii), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
10	HYDROGEO	504(1)(d), 506(1)(e)(iii), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
11	HYDROGEO	504(1)(d), 506(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
12	HYDROGEO	504(1)(d), 506(2), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
13	GWM ENG REPORT	504(1)(d), 506(2)(a)(i), 508(1)(b)	Section E	The application must show that there are 5 soil borings showing subsurface geology at the site installed for the first five acres.
14	GWM ENG REPORT	504(1)(d), 506(2)(a)(ii), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.

	NUMBER CATI 15 GWM REPO		/m\/:::	MION
	16 GWM EN REPORT	NG 504(1)(d) 506(2)(a)(508(1)(b)	, (ii), Section E	Yet to be reviewed with respect to technical adequacy. Yet to be reviewed.
	17 GWM ENG REPORT	504(1)(d), 506(2)(a)(ii), 5 (b)	Section E	Yet to be reviewed with respect to technical adequacy. Yet to be
18	GWM ENG REPORT	504(1)(d), 506(2)(a)(ii), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy. Yet to be reviewed with respect to technical adequacy.
9	GWM ENG REPORT	^{504(1)(d)} , 506(2)(a)(iii)(A), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy. Yet to be reviewed with
VMD.				Yet to be reviewed with respect to technical adequacy.

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NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
20	GWM ENG REPORT	504(1)(d), 506(2)(a)(iii)(B), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
21	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(A), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
22	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(B), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
23	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(C), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
24	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(D), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
25	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(E), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
26	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(F), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
27	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(G), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
28	GWM ENG REPORT	504(1)(d), 506(2)(a)(iv)(H), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
29	GWM ENG REPORT	504(1)(d), 506(2)(a)(v), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
30	GWM ENG REPORT	504(1)(d), 506(2)(a)(vi), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
31	GWM ENG REPORT	504(1)(d), 506(2)(b), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
32	GWM ENG REPORT	504(1)(d), 506(2)(c), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
33	GWM ENG REPORT	504(1)(d), 506(2)(e), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
34	GWM ENG REPORT	504(1)(d), 506(2)(f), 508(1)(b)	Section E	Any future monitor wells installed must be continuously sampled and logged for the entire depth of the boring.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
35	DETECTION MONITORING	504(1)(d), 506(3)(a), 508(1)(b) 612 264.98(a)	Section E	Yet to be reviewed with respect to technical adequacy.
36	DETECTION MONITORING	504(1)(d), 506(3)(b), 508(1)(b) 612 264.98	Section E	Yet to be reviewed with respect to technical adequacy.
37	DETECTION MONITORING	504(1)(d), 506(3)(c), 508(1)(b) 612, 611(2)(a)(xi) 264.97(g)	Section E	Yet to be reviewed with respect to technical adequacy.
38	DETECTION MONITORING	504(1)(d), 506(3)(f), 508(1)(b) 612 264.98	Section E	Yet to be reviewed with respect to technical adequacy.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
39	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611		•
40	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)		
41		504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
	MONITORING	611(2)(a)(i)		
		•		
42	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
	Moraro	611(2)(a)(ii)		
43	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(iii)		

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
44	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(iv)		
45	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(v)		
46		504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
	MONITORING	611(2)(a)(vi)		
47	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
	MONITORING	611(2)(a)(vii)		
48	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(viii)		

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
49	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(x)		
50	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Yet to be reviewed with respect to technical adequacy.
		611(2)(a)(xi)		
51	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b) 611(2)(c)	Section E and page A-4	Completeness issue.
52	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b)	Section E	Completeness issue and yet to be reviewed with respect to technical adequacy.
		611(2)(d)		
53	ENVIRONMENTAL ASSESSMENT	504(1)(e), 508(1)(b)	Not included in application	Completeness issue.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
54	PART A	504(1)(b), 508(1)(b)	Attachment A-1	Page A-3 of the application suggests that the facility name is "Detrex Corporation Solvents and Environmental Services Division," whereas information on the form itself indicates that the facility name is "Detrex
		270.13(b)		Corp. Solvent Facility." The application should be revised to provide a consistent facility name.
55	PART A	504(1)(b), 508(1)(b)	Attachments A-2 and A-3	The facility plan contained herein, and in many other parts of the application, must be revised to accurately reflect the equipment present at the facility and the names, uses, and regulatory status, thereof. A listing
		270.13(h)		of the equipment, similar to that contained in the facility's existing operating license would be very useful. For example, the stills, feed tanks (certified closed), and drying columns are no longer used for hazardous waste management. The plan must also be revised to include the location of the "staging area" and transfer facility.
56	PART A	504(1)(b), 508(1)(b) 270.13(j)	Attachment A-1	Upon comparing the list of hazardous wastes that the facility is currently licensed to store and the list of wastes managed that is included in Attachment A-1, it was noted that D038 has been deleted and D002, D031, D032, F006, F019, U037, U044, U072, U075-U078, U080, U121, U127, U131, U208-U211, U226, and U228 have been added. The newly
				added wastes may not be stored at the facility until such time that they are formally incorporated into a license.
57	PART A	504(1)(b), 508(1)(b)	Attachments A-1 and A-4	Information on page A-4 suggests that the Detroit Water and Sewerage Department (DWSD) no longer requires the facility to operate under a discharge permit. However, page K-3 suggests that a pretreatment
		270.13(k)		permit is still in place. Please make the necessary revisions to the application to remove such discrepancies and reflect the actual conditions at the facility.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	
58	GENERAL	504(1)(c), 508(1)(b)	Section B-1
		270 14(h)(1)	

270.14(0)(1)

COMMENT

Two standard industrial codes (SICs), 2869 and 5161, are listed in Attachment A-1. However, only SIC 2869 is referenced in the general facility description. The application must be revised to clarify which code(s) are appropriate and include a description of the applicable code(s).

Additionally, the information on page B-6 suggests that three container storage units, and primary and secondary loading/unloading area, and a primary and secondary staging area are being planned. However, information included in Sections A and D suggest that there are going to be four container storage units, one staging area, and one unloading area. The information contained in the application must be reconciled such that consistent information is provided throughout. Additionally, all hazardous waste storage units must be clearly, and consistently labled on the facility plan and other drawings.

Page B-9 refers to the collection and testing of runoff. The runoff is discharged to the sewer. In addition to determining if the runoff is a hazardous waste, it should also be tested to determine if it is contaminated and in violation of discharge limitations. According to the application, the facility is a minor discharger and no longer has a DWSD permit. Please clarify in the application whether or not this potential discharge violates the facility's minor discharger status and whether or not the DWSD is aware of the discharge.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
59	C&P ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages 6 8 and Attachment C-2

605(1) 270.14(b)(2)

264.13(a)(1)

COMMENT

C-2- Please delete the references to the requirements which do not apply to t C-1- the facility such as tanks, landfills, dioxin wastes, radioactive mixed waste, contaminated debris, etc., from Section C, as well as other portions of the application as appropriate.

Section C, as well as other portions of the application, must be revised by changing the references to the federal "RCRA Part B Permit," "permit," etc., to "operating license," "license," etc., respectively, since the application is for a state hazardous waste management facility operating license under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

The spelling of the word "treatment" must be revised in the F019 listing in Attachment C-1, as well as other places in the application, where the list of hazardous wastes appears.

Trichlorofluoromethane (last item listed) in Attachment C-1 is missing the designation as "toxic" or "corrosive" (T or C) after the listing.

Information concerning endrin, benzene, nitorbenzene, vinyl chloride, trichlorofluoromethane, 1,1,2,2,-tetrachloroethane, and 1,2,2,2-tetrachloroethane must be provided in Attachment C-2 since, per Attachment C-1, they may be included in the hazardous wastes that may be accepted at the facility. Additionally, the reference to "1,1,2-trichloro-1,2,2-trifluoromethane" must be changed to "1,1,2-trichloro-1,2,2-trifluoroethane."

The application must be revised to address how the issues of segregation, compatibility, and secondary containment will be assessed relative to the storage of non-hazardous wastes in the hazardous waste storage areas.

The phrase "... are maintained at the Facility received at the facility to describe the ..." in the third paragraph on page C-6 does not make

sense. The sentence containing this phrase must be rewritten.

The reference to storage of hazardous waste "in a trailer within the dock area" on page C-7 must be deleted. Detrex is only authorized to store waste in the licensed container storage units. This may refer to the transporter/transfer facility and should not be included in the application.

Page C-15, Section C-2d(2), deals with waste incoming from other Detrex facilities. The presumption is that the waste profiling and approval systems will be the same or at least compatible. The application should document that the waste analysis plan systems are essentially the same and that no information is being overlooked by another Detrex facility. The Michigan Department of Environmental Quality (MDEQ) will then make a determination if the proposal is acceptable.

Attachment C-1 does not include waste codes F003 and F005 (ignitable listed wastes), or waste code F004 (toxic), and the Facility does not intend to accept ignitable waste. Page C-21, Section C-3a(1), however, makes reference to generator process knowledge being used to determine if the waste is F001-F005 listed. This section should be clarified to show that the facility does not accept ignitable F003, F004, or F005 waste.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
60	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b) and (c)	Section C, page C-9, et. Al

Page C-7, Section C-1a, refers to liquid hazardous waste stored in adequate secondary containment. This should be revised to refer to, or address, secondary containment for solid hazardous waste.

The third paragraph on page C-9 must be revised to state that Detrex will (not "may") ensure that samples provided by the generator are properly collected and are representative of the waste stream.

Page C-9, Section C-2, paragraph 4 indicates that the facility "may" conduct an analytical confirmation as a secondary check of the profile sheet. Please clarify if the application is referring to fingerprint analyses or additional analyses as part of the approval process.

The third paragraph on page C-10 must be revised to state that "the wastes will (not "may") be screened for parameters such as: specific gravity, flammability, pH, water reactivity, reactive cyanide, free liquids, and compatiability."

The second paragraph on page C-10 must be revised to state that the waste profile sheet and analysis, if appropriate, will be updated if inspection of the incoming hazardous waste indicates that the waste does not match the waste designated on the accompanying manifest.

Page C-17, Section C-2e, the first line reads, "As noted in Section C-1,...." This should read "Section C-2...."

The Quality Assurance Project Plan (QAPP) provided as Attachment C-7 is missing page 11. The QAPP also does not contain any discussion of how samples shipped to an off-site laboratory will be secured/sealed to prevent tampering. This information must be included in the application.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
61	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, page C-10

605(1) 270.14(b)(3)

COMMENT

The list of parameters to be evaluated for each container must be revised
 to include color, odor, appearance, etc., which are considered as part of the required visual inspections of each container.

Also, the application must be revised to address when additional testing may be conducted, consistent with the facility's existing operating license.

Table C-5 in Attachment C-5 must include an entry for U075 if the facility wishes to accept this waste.

With respect to the waste rejection procedures outlined on pages C-11-C-12 and Attachment C-6, the state is currently pursuing incorporation of rejected load procedures into the administrative rules promulgated pursuant to Part 111 of Act 451. A copy of the draft rules is enclosed for your use. The new rules will likely be effective before any renewal operating license for the facility would be drafted. Therefore, it is recommended that the application be revised as necessary to conform with the pending rules and that Attachment C-6 be deleted. Additionally, the information provided in Section C-2a(1), items 1-6, must be revised as appropriate to clearly state when a manifest may be signed (i.e., waste accepted and the transporter allowed to leave), and where the waste is located during the various steps.

The application must be revised to describe how the results of the fingerprinting are documented and include a copy of the form documenting the fingerprinting results, consistent with the facility's existing operating license.

Reactive cyanide is identified as a screening parameter in the last paragraph of Section C-2. However, it is not included among the list of parameters in Section C-2a, and should be.

Section C-2b(3), page C-13, indicates that the facility "may" conduct pH testing as part of the fingerprint process. The application must be revised to clarify under what circumstances the facility plans to do pH fingerprint

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FEDERAL RULES APPLICATION

COMMENT

testing, or that they will do pH testing on on all incoming loads.

The list of parameters does not address characteristics which might be present in a listed waste, or identify all characteristics for any given waste stream. The facility currently relies on generator characterizations to characterize the outbound waste when they are taking generator responsibility. If the original generator characterization does not adequately address all characteristics, the facility is also in violation as a generator of 40 Code of Federal Regulations (CFR) 268.9. The facility is currently working on a plan to provide a general, "by-category" characterization which will address all characteristics for a waste stream. This should be addressed in the application.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
62	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(2)	Section C, Attachments C-3 and C-7 and Sections D-1 and D-1a(2)	The second paragraph in Section C-2b must be revised to make it clear that the wastes cannot be accepted, let alone "processed (transferred offsite)," until the sampling and analysis referenced therein are completed and the results are deemed satisfactory. This concept also applies to Sections D-1, page D-5, and D-1a(2), page D-8. The first paragraph on page D-5 and item 6 on page D-8 must be revised to make it clear that wastes cannot be accepted (which is denoted by signing the manifest and the transporter leaving the facility) unitl the waste screening process is completed and acceptable results are yielded.
		,		Attachment C-3, as well as the other places in the application were the hazardous wastes groups list appears, must be revised to include Reactivity Group Numbers 7, 28, and 29 which correspond to amines, aliphatic and aromatic; hydrocarbons, aliphatic-saturated; and hydrocarbons, aliphatic-unsaturated, respectively. This revision is necessary since page C-6 suggests that such chemicals will be accepted at the facility.
				The application must be revised to address in detail how containers in the staging area, for which fingerprinting has not yet been completed, are distinguished from containers in the staging area, for which fingerprinting has been completed and may now be moved to the container storage unit.
63	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(3)	Section C, Attachment C-7	Page C-15 must be revised to explain how and where sampling equipment decontamination will be conducted. The sample compositing process described in Section C-2c, and elsewhere in the application, has the potential to mask deviations in the properties of incoming wastes due to dilution inherent in the compositing process, and is not acceptable for any parameters. This proposed procedure must be revised to one where random samples of at least ten percent of the incoming wastes, per waste type, per generator, are taken and analyzed as discrete samples. All relevant portions of the application must be revised accordingly.

Monday, March 06, 2000

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
64	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(4)	Pages C-9, C-10, C- 15, and C-20	Page 2 of the generator waste material profile sheet must be revised by changing "Section VI Certifications" to "Section VII Certifications" and correcting the "TCLP regulatory action level" for mercury.
65	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(6)	Section C, pages C- 11, 13, and 17-19, and Section D-1	Section D-1, page D-5, second paragraph, must be revised to clearly state that only containers with compatible waste materials will be placed in the same container storage area or in the staging area. The application must be revised to indicate whether the facility intends to have waste areas permanently designated to hold a specific reactivity group. The application must include more information on how the facility plans to manage hazardous wastes that may fall into two or more reactivity groups.
66	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(6)	Not included in application	This information was not specifically included in the application. If the facility is accepting wastes subject to 40 CFR Part 264, Subpart CC, it is likely accepting them in Michigan Department of Transportation (MDOT) approved containers, which would be a Level 1 control. The facility would then be subject only to the 24 hour inspection requirements under Subpart CC. The application must be revised to address these requirements.

CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C-20-24
	605(1)	
	270.14(b)(3)	
	264.13(b)(6)	
	CATEGORY WASTE ANALYSIS	CATEGORY FEDERAL RULES WASTE ANALYSIS 504(1)(c), 508(1)(b) 605(1) 270.14(b)(3)

The fourth paragraph on page C-16 must be revised to state that the personnel will review the land disposal restriction (LDR) forms for incoming shipments of hazardous wastes as well as the manifests.

Page C-20, Section C-3a, refers to annual LDR forms, while the third paragraph of this same section refers to annual forms as applicable under state law. Currently, annual LDR forms are not acceptable in Michigan (still on a per-shipment basis). Since this will change soon, it is recommended that the first paragraph be modified to agree with the third paragraph of this section ("as applicable under state law").

With respect to page C-20, Section C-3a, items 1 and 2, if the Facility will be correcting or completing the LDR forms under the direction of the generator, the application should be revised to describe how such changes will be recorded.

Page C-21, Section C-3a(2) and (3), indicates generator process knowledge will be used to determine if hazardous wastes meet the applicable treatment standards or to demonstrate that the waste has been treated by the appropriate specified treatment technology. Generator process knowledge may not always be appropriate or acceptable.

Page C-21, Section C-3a(3), refers to addressing the underlying hazardous constituents for D002 corrosive wastes. The underlying hazardous constituents should be addressed for all characteristics with a few exceptions (not just D002).

Page C-23, Section C-3b(1). This should be revised to indicate exactly how long the facility will maintain copies of the LDR forms.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
68	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(c)(1)	Section C	Page C-11, Section C-2a(1)(4), suggests that if the facility encounters a discrepant waste, but one the facility can still accept, they will have the generator reprofile and remanifest the waste and provide the new information via overnight delivery. The application must be revised to clarify the location and handling of the waste until the revised paperwork has been received.
69	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(c)(2)	Section C	The sample compositing process described in Section C-2c has the potential to mask deviations in the properties of incoming wastes due to dilution inherent in the compositing process. This proposed procedure should be revised to one where random samples of at least ten percent of the incoming wastes are taken and analyzed as discrete samples.
70	SECURITY	504(1)(c), 508(1)(b) 605(1) 270.14(b)(4) 264.14	Pages F-6-7	Based on the information provided in the application and observations made by the MDEQ staff during its February 29, 2000 visit to the facility, only the southern, eastern, and western perimeters of the facility are secured by a fence. The northern perimeter of the facility is not secured at all. Access could be made by coming down the railroad siding from either the east or west, and entering on the north side of the facility near the gravel area. The fence on the north side of the railroad siding in this area is not on facility property, nor is it under the ownership or control of the facility. The application must be revised to explain how (type, location, installation schedule, etc.) the appropriate fencing will be provided so that access is completely limited on all perimeters of the facility.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
71	INSPECTION	504(1)(c), 508(1)(b)	Pages F-7-10 and Attachments F-4 and F-5	Please delete the references to tanks systems, landfills, and other types of units that do not exist at the facility from Section F. It is not necessary to include this information in the application.
		605(1) 270.14(b)(5) 264.15(b)		Attachment F-4 and F-5 must be revised to include inspection of the alarm system and the electronic surveillance system, consistent with the facility's existing operating license. Additionally, Attachment F-4 suggests that the emergency lighting will be inspected on a monthly basis, however, Attachment F-5 suggests that it will be inspected on a weekly basis. The application must be revised to clarify the frequency upon which the lighting will be inspected.
				References to the inspection of the transfer station, an entity separate from the currently licensed facility, in Section F-2, should be deleted from the application.
72	INSPECTION	504(1)(c), 508(1)(b) 605(1) 270.14(b)(5) 264.15(b)(4), 264.1088	Not included in application	Completeness issue.
73	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.51	Section G	Please delete the references to tank, surface impoundment, and containment building spills and leaks from the table of contents and Section G. Inclusion of this information is not necessary since such hazardous waste units are not present at the facility. Additionally, please change the federal contingency plan requirement citations in Section F, such that the subregulation references are lowercase (e.g., "(a)" not "(A)." It is recommended that all sections of the application be checked to ensure that the federal regulation citations contained therein are accurate, particulary with respect to subregulation references.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION IN
74	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(a)	Section G
75	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(2) 270.14(b)(7) 264.52(a) 264.56(a)(2)	Section G

The words "within 24 hours" in Section G-4a, item 1, must be changed to "immediately" in accordance with the appropriate regulations.

The contingency plan must be revised to specifically state that the owner or operator shall immediately notify the MDEQ's Pollution Emergency Altering System (PEAS) in the event of a fire, explosion, or other release of hazardous waste or hazardous waste constituent that could threaten human health or the environment, or if the owner or operation has knowledge that a spill has reached surface water or groundwater. Currently, the application only contains a specific reference to the National Response Center and situations that threaten human health outside of the facility. Items to be included in the notification to the PEAS include: the name and telephone number of the person reporting the incident; the name, address, telephone number, and the United States Environmental Protection Agency (U.S. EPA) identification number of the facility; the name, address, and telephone number of the owner or operator; the date, time, and type of incident; the name and quantity of the material or materials involved and released; the extent of injuries, if any; the estimated quantity and disposition of recovered material that resulted from the incident, if any; an assessment of actual or potential hazardous waste to human health or the environment; and the immediate response action taken.

The MDEQ, Waste Management Division, Detroit Office, should be added to the list of entities to be notified in the event of an emergency on Attachment G-2.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
76	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(c)	Page G-18 and Attachment G-6	Completeness issue.
77	PREPAREDNESS & PREVENTION	504(2), 504(3), 508(1)(b) 604(1)(a), 614(1)(a), 615(1) 270.15(a), 270.16(g) 264.175(b)(4), 264.193(e)	Section D. Comments provided under other records.	See comments under the Containers category.
78	PREPAREDNESS & PREVENTION	504(1)(c), 508(1)(b) 270.14(b)(9)	Pages F-14 and F-15	Please delete the reference to Section F-5e from the last paragraph in Section F-5b. Attachments F-2 and F-7 are identical. Therefore, please delete Attachment F-7 and update the references in the application.
79	PREPAREDNESS & PREVENTION	606 264.35	Section F	Attachment F-6 references air horns. Such horns are not specifically addressed in Section F of the application, however. Attachment F-6 must be revised to include the location of the drum pump, brooms, shovels, protective clothing, and hard hats. Additionally, Attachment F-6 must show the location of the main electrical disconnect (MED) as noted in the legend. There is an "ED" on the figure that may need to be corrected to "MED." The comments regarding revision of Attachment F-6 also apply to Attachment G-4.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION
80	LOCATION	504(1)(c), 508(1)(b)	Section K
		270.14(b)(20) 270.3	
81	TRAINING	504(1)(c), 508(1)(b)	Section H

270.14(b)(12)

COMMENT

The application must be revised to include the compliance letters referenced in this section.

Page H-5, Section H-1d, indicates that the contents of the training program are tailored to each position, and then refers to Attachment H-2. Attachment H-2 is the outline of training, but it does not clarify what contents of the training program are provided to which staff. Page H-6 goes into some detail about what portions of training are provided to staff. Each job class does not receive training in the contingency plan. Others receive training in "appropriate components" of the contingency plan. This section must be revised to document what portions of the contingency plan are provided to each staff person and why.

Page H-6 addresses the positions "facility operator" and "truck driver," however, job descriptions for these positions are not provided in Attachment H-1. Conversely, job descriptions are provided for "warehouseman" and "quality control coordinator" in Attachment H-1, but these positions are not listed on page H-6. These discrepancies must be corrected and consistent names used for each position.

The word "disposal" should be deleted from item 1 under Responsibilities of the "warehouseman" job description.

Please clarify the type of degree field that would be required of the "quality control coordinator."

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
82	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(1)	Section H	Please delete the references to closure of tanks, waste piles, surface impoundments, incinerators, landfills, land treatment facilities, miscellandous units, boilers and industrial furnaces, and containment buildings from the table of contents and Section I. Inclusion of this information is not necessary as these units do not exist at the facility. Please replace all references to "Regional Administrator" in the closure plan with "Director of the Department."
83	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(2)	Section H	Section I-1b must be revised to state that the MDEQ will be provided with 60 days advance notice of any partial closure.
84	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Pages I-8 and I-9	Section I-1e(4) must be revised by changing the word "may" in the second sentence of the second paragraph to "will." The application must be revised to address the circumstances under which additional cleaning of the containment systems (container storage unit, staging area, loading/unloading area) will be conducted. Please refer to the existing operating license for further information.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
85	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Pages I-8 and I-9	Overall, the closure plan must be revised to include more detail concerning soil sampling methods and strategies, if necessary, that will be used during the closure process. This discussion should include under what circumstances soil sampling will be determined to be necessary.
				The first paragraph on page I-9 must be revised to make it clear that the decision whether or not it is necessary to conduct soil sampling underneath the container storage units and the staging area will be based on the information in outlined therein, and on consultation with and approval by the MDEQ at the time of partial and/or final closure.
				The application must be revised to include provisions for conducting soil sampling in the loading/unloading area. Please consult existing operating license for further information.
				Information concerning the parameters to be analyzed in conjunction with any soil sampling, related methodology, and the cleanup criteria must be included in the application.
86	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Page I-9	The parameters to be analyzed to verify extent of contamination should be addressed as part of the discussion of soil sampling procedures.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
87	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Pages I-7 - I-9 and Attachment I-2	Attachment I-2 must be revised to include information pertaining to trichloroethylene since it is a constituent that may be stored at the facility. Additionally, the application must be revised to make it clear that the parameters and cleanup levels contained in Attachment I-2 are for wastewater analysis only in evaluating the effectiveness of the secondary containment decontamination. These cleanup levels are not for evaluating soil contamination. In particular, the lead level of 0.015 ug/L proposed is higher than the Part 201, Environmental Remediation, of Act 451 drinking water standard of 0.004 ug/L.
88	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(6) 264.112(d)	Section I-1d and Attachment I-4	The references to "Regional Administrator" in Sections I-1d(1) and I-1d(1)(a) must be changed to "Director."
89	CLOSURE	504(1)(c), 508(1)(b) 613(3) 270.14(b)(13) 264.115	Section I-3	The reference to "Regional Administrator" in Section I-3a must be changed to "Director." Section I-3a must be revised to clarify that the certification statements will be prepared in accordance with 40 CFR 270.11(d). The application must also be revised to include a list of items to be included in the certification report.
90	FINANCIAL	504(1)(c), 508(1)(b) 702(1) 270.14(b)(15) 264.142	Section I-4 and Attachment I-5	Item B in the closure cost estimate must be revised to include decontamination of the staging area.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
91	GENERAL	504(1)(c), 508(1)(b) 270.14(b)(19)	Section B-2A and Attachments B-1 - B-8	Completeness issue.
92	ENGINEERING	504(1)(g), 508(1)(b)	Attachment D-3	Completeness issue.
93	ENGINEERING	504(1)(g)(i), 508(1)(b)	Attachments D-1 - D-3	Completeness issue.
94	ENGINEERING	504(1)(g)(iii), 508(1)(b)	Attachments D-1 - D-3. Also see comments under the Containers category.	Pursuant to the agreement between the U.S. EPA and the MDEQ, the state is not handling the biennial reporting program. Therefore, Section D-13a, page D-15 must be revised by replacing the words "Regional Administrator" with "Director of the Department."
				The facility is advised that "excessively dented" containers, as mentioned in Section D-1(a)(1)(3), would not likely be MDOT approved.
				Section D-1a(3) refers to the transfer station as part of the secondary containment system. This reference should be removed, as the transfer station is a separate entity from the currently licensed portion of the portion of the facility. The unloading/loading area, however, does provide secondary containment for shipments of hazardous waste while they are being unloaded/loaded.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
95	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(a)(1)	Section D-1a(3) and Attachments D-1, 2, 3, and 6	The application must be revised to address the issue of squirt protection and how the secondary containment system and facility management practices will ensure that waste squirting from a container will be contained. This is of particular concern with respect to incompatible wastes.
96	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(a)(3)	Sections D-1a(3) and (3)(c) and Attachment D-7	The application must contain a more detailed description of how the secondary containment for container storage area #4 was determined. It is not clear from the calculations what areas are being relied upon to provide the necessary secondary containment. The application must also address the secondary containment system for the staging area. Additionally, the application must address the existence of other materials that may be managed within the subject containment system and their impact on the secondary containment calculations for the hazardous wastes in the container storage area.
97	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(d)	Section D-1a(2)	The application must be revised to include specific details regarding the procedures to be used to comply with 40 CFR 264.17 and 264.177.
98	CONTAINERS	270.15(e)	Not included in application	Completeness issue.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
99	AIR	504(16), 508(1)(b)	Not included in application	Completeness issue.
		270.27		
100	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Page J-4 and Attachment J-1	The list of waste management units at the facility must be expanded to include the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the
		270.14(d)(1)(i)		facility (as noted in the existing application).
101	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application
		.270.14(d)(1)(ii)		
102	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Pages J-4 and J5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.
		270.14(d)(1)(iii)		
103	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.
		270.14(d)(1)(iv)		

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
104	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.
		270.14(d)(1)(v)		
105	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Page J-5	More detail regarding the releases referenced in Section J-2A must be provided.
		270.14(d)(2)		
106	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Not included in application	This item is dependent on the response to the previous item concerning more detail about the three releases stated to have occurred at the facility.
		270.14(d)(3)		

GNT.

NATURAL RESOURCES COMMISSION

KEMH J. CHARTERS, Chair JERRY C. BARTNIK NANCY A. DOUGLAS L. THORNTON EDWARDS, JR. PAUL EISELE BOR GARNER WILLIAM U. PARFET

STATE OF MICHIGAN



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DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING, PO BOX 30028, LANSING MI 48909-7528 WEBSITE: www.dnr.state.ms.us

K. L. COOL, Director

June 27, 2000

REPLY TO:

FOREST MANAGEMENT DIVISION XC: Library LANSING MI 48909-7952

RECEIVED

JUN 29 2000

DETREX CORPORATION

P.O. Box 5111 Southfield, Mi 48086-5800

Subject: Detrex Corporation

Mr. David Craig, CHMM, CET

Detrex Corporation

Dear Mr. Draig:

Thank you for the opportunity to review and comment on the Detrex Facility located in Detroit, Michigan, relative to state designated rivers under Part 305, Natural Rivers, Public Act 451 of 1994, and federally designated Wild and Scenic Rivers, under Public Law 90-542 of 1968, as amended.

Currently, there are no federally designated Wild and Scenic Rivers or state designated Natural Rivers within the City of Detroit, Michigan that would be affected by your project.

Therefore, no permits will be required under the Wild and Scenic Rivers Act, PL 90-542 of 1968, or Part 305, Natural Rivers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, for this project.

If you have any further questions regarding this matter, please call me.

Steve Sutton

Natural Rivers Administrator

FOREST MANAGEMENT DIVISION

517-241-9049

suttonsl@state.mi.us

SS/ms

Post-it* Fax Note 7671	Date 6/29 pages /
TO Q. Blayer	From Dania
Co./Dept.	Co.
Phone #	Phone #
Fax # 5/7-373 479	7 Fax #

DETREX CORPORATION

MID 091 605 972

HAZARDOUS WASTE MANAGEMENT FACILITY RENEWAL OPERATING LICENSE APPLICATION TECHNICAL REVIEW NOTICE OF DEFICIENCY

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
1	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b) 611(2)(c)	Section E and page A-4	If the facility is seeking a waiver from the ambient air monitoring program requirements, then the application must be revised to provide justification for such a waiver, including concurrence from the Wayne County Department of Environment, Air Quality Division, that ambient air monitoring (not a permit) is not required even though bulking activities are still conducted at the facility for off-site shipment of hazardous waste (as is stated in the waste analysis plan). Depending on the adequacy of the waiver demonstration, additionally deficiencies may be noted.

NUMBER	CATEGORY	FEDERAL RULES		
2	PART A	504(1)(b), 508(1)(b)	Attachment A-2, et. al.	As has been previously co delineate between the exist modifications (not current)
		270.13(h)		facility, it is the DEQ's under

communicated, the application must clearly isting facility and the proposed facility tly licensed). Based on discussions with the facility, it is the DEQ's understanding that the proposed modifications to the facility will not likely be put into place prior to the DEQ reaching a final decision on the pending application. Therefore, any modifications to the facility design would be handled through a schedule of compliance in the license if sufficient information is submitted prior to the licensing decision deadline, or as a license modification at some future date. As such, the general facility plans and associated equipment lists contained in Attachments A-2, B-6, D-1, E-3, F-3, F-6, G-3, G-4, G-5, I-2, and J-1 must be revised to accurately reflect the equipment present at the existing facility. If unit 14 is "dismantled and removed" then it must not appear on the existing facility layout equipment list or figure. If units 24 and 26 were removed after being "dismantled", then they too should not be on the list or figure. The labels "hazardous waste storage tanks" and "reclamation room" must also be removed from the figure. These labels are not appropriate given the current activities at the facility. Additionally, the staging area must clearly be delineated on the figure. It must be its own distinct area (one that is not also used to storage waste once the screening process has been completed and the wastes have been accepted).

NUMBER	CATEGORY	FEDERAL RULES	APPLICATION IN
3	GENERAL	504(1)(c), 508(1)(b)	Entire application
		270.14(b)(1)	

Page B-5 suggests that the facility contact is Mr. Hani Hamawi. However, the Part A permit application suggests that it is Ron Hritzkowin. This discrepancy must be addressed.

Page B-6 must be revised to clearly identify the extent of the "expanded hazardous waste operations" at the facility. It warrants repeating that storage includes both indoor and outdoor storage of the waste, "temporary" storage as is currently done in unit 29, and any waste in the staging area. Thus, the total volume of hazardous wastes in all of these areas must not exceed the facility's storage process design capacity of 13,750 gallons.

If Detrex wishes to pursue the outdoor hazardous waste container storage unit that it proposed on June 7, 2000, it will be required to cease its transfer facility activities currently conducted at the facility. In other words, the entire area currently housing the transfer facility would be become the outdoor storage area. Typically, transfer facilities are not allowed at hazardous waste treatment, storage, or disposal facilities as they are considered a means to expand a facility's capacity without going through the state's construction permit process. Continued operation of Detrex's transfer facility has been allowed historically since the transfer facility was only allowed to manage wastes that were not also stored at the facility (i.e., ignitable hazardous wastes). However, with the proposal to store ignitable hazardous wastes in the outdoors container storage unit, the transfer facility operations must cease. Page B-8 and the rest of the application must be reviewed and revised accordingly.

The proposed facility layout lists and figures in Attachments A-2, B-6, C-3 (recent revision that may be labeled incorrectly), D-2, F-3, G-3, and I-2 require revision. Each unique hazardous waste container storage unit, along with its boundaries, must be clearly identified on the lists and figures rather than lumping them under a general heading. This is necessary as each unit is considered separately with respect to drum configuration, squirt and leak protection, secondary containment, etc. In identifying area 5, the figure must show the location of the truck

STATE RULES **LOCATION IN**

FEDERAL RULES APPLICATION

COMMENT

containment unit. Additionally, multiple staging areas are not acceptable. Only one staging area will be allowed, and the lists and figures must be revised accordingly. The staging area must be its own distinct area (one that is not also used to store waste once the screening process has been completed and the wastes have been accepted). Also, it was the DEQ's understanding that the facility wished to retain the product blending vessel denoted by ID number 28 on the existing facility layout list. However, the unit description does not appear on the proposed facility layout list (labeled as a staging area) but does appear on the figure. The figure must also be revised to include a legend similar to the existing facility layout figure. It is not clear what is meant by the shading on several of the units on the proposed facility layout figure. The application must be revised to address these comments. To the extent that these comments impact other portions of the application (Attachments F-6, G-4, G-5, and J-1 for example), those portions must be revised too.

NUMBER CATEGORY

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
4	C&P ANALYSIS	504(1)(c), 508(1)(b)	Section C an Attachments therein and Section D
		605(1)	
		270.14(b)(2)	
		264.13(a)(1)	

Attachment C-8, Rejected Load Procedures, was deleted in conjunction with the last submittal of the revisions to the application. However, references to it still appears in Section C (see the List of Attachments and page D-9). Attachments C-9 and C-10 are referenced in Section C (see the List of Attachments), however, the cover sheet for Attachment C-9 was not provided with the revisions nor was Attachment C-10. These discrepancies must be addressed.

On page C-10, 5th paragraph, last sentence, the word "may" must be changed to "will."

Several discrepancies exist with respect to the information included in Attachments C-1, C-2A, C-2B, and C-2C, and must be corrected. The reference to "trichlorofluoromethane (last item listed in Attachment C-1) has been changed to "trichlorofluoroethane" since the last submittal. This does not appear to be correct. The spelling of the word "toluene" on page 2 of Attachment C-1 and Attachment C-2C must be corrected. Also, please correct "fromzirconium" on page 2 of Attachment C-1. The reference to "1,1,2-trichloro-1,2,2-trifluoromethane" in Attachment C-2A must be changed to "1,1,2-trichloro-1,2,2-trifluoroethane." Additionally, this parameter must be included in Attachment C-1. Since acetone is listed in Attachment C-1, it must be included in Attachment C-2A. It is not clear why methyl ethyl ketone is listed twice in both Attachments C-2A and C-2B. The parameter 4-methyl-2-pentanone (MIBK) is listed in Attachment C-2B but is not identified in Attachments C-1, C-2A, or C-2C. Additionally, MIBK can also be a U161 waste. If it is the facility's intention to store this type of waste, then the application must be revised accordingly. Attachment C-2C contains references to methylene chloride, trichloromonofluoromethane, ortho-dichlorobenzene, and monofluoromethane, none of which appear to be referenced in Attachments C-1, C-2A, or C-2B. Consistent parameter names must be used between the various attachments. Attachment C-2C contains two references to F006 waste and no references to F005 or D001 wastes, wastes that the facility wishes to accept.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
				Page C-17, Section C-2d(2), deals with waste incoming from other Detrex facilities. The presumption is that the waste profiling and approval systems will be the same as required in Michigan or at least compatible. The application must fully document that the waste analysis plan systems are essentially the same and that no information is being overlooked by another Detrex facility. It must also state that copies of all test results from other Detrex facilities will (not may) be placed in the operating record. The DEQ will then make a determination if the proposal is acceptable.
				Page C-24, Section C-3a(1) makes reference to generator process knowledge being used to determine if the waste is F001 or F002 listed. This section must be revised to clarify that it is also the facility's intent to accept F003 and F005 listed wastes.
5		504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b) and (c)	Section C and Attachment C-6	The word "requested" in the third paragraph on page C-10 must be changed to "required."

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION
6	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 12-C-21 and Attachment C-5
		605(1) 270.14(b)(3)	

Section C-2b(1) must be revised to clarify that specific gravity analysis frequency described therein pertains to a single waste stream per generator.

The first sentence in Section C-2b(2) must be revised to clarify that the flammability analysis described therein pertains to 10 percent of each hazardous waste stream per generator. Additionally, the first sentence in Section C-2b(3) must be revised to reflect the 10 percent of each hazardous waste stream per generator frequency.

The references to Section C-2d(6) in Sections C-2b(2) and C-2d(2) appear to be incorrect.

The first reference to Section C-2d(5) in Section C-2b(3) and the same reference in Section C-2d(2) appear to be incorrect.

Section C-2b(5) must be revised to specifically state that the facility will compare the findings of the visual and olfactory observations of incoming waste to the information on the generator's profile to ensure consistency between the two. As currently drafted, this section is so broad as to make enforcement thereof questionable.

The third paragraph on page C-17 must be revised to clarify what is met by "visual observation" and "testing for compatibility". Also, the phrase "may consist of" therein must be changed to "will consist of".

Section C-2d(4) as drafted is very discretionary and needs to be revised to include more specifics as to when additional testing will (not may) be done.

As has previously been communicated to the facility, the state is pursuing incorporation of rejected load procedures into the administrative rules promulgated pursuant to Part 111 of Act 451. The new rules will likely be effective before any renewal operating license for the facility would be drafted. That being the case, compliance with the promulgated rejected

load requirements will be required. Therefore, all references to the the DEQ's procedure for rejected loads must be deleted from the application. As was previously requested, the application must clearly state when the manifest may be signed (i.e., waste accepted and the transporter allowed to leave) and where the waste is located during the various steps. Section C-2d(5) must be clear that the transporter is required to remain on-site until the waste is accepted by signing the manifest or rejected. Additionally, delete the duplicate text at the top of page C-20 (see bottom of page C-19).

The duplicate text for the beginning of the Section C-2d(4) at the bottom of page C-18 must be deleted. Section C-2d(4) must be revised to state that the results of any additional testing will be recorded and placed in the operating log. Additionally, this section must be revised to state that any additional testing will be done on a discrete sample basis similar to other analyses and not on a composite sample basis.

The table in Attachment C-5 must be revised to require flammability testing for all waste streams except for those that are already known to be flammable (e.g., D001).

The flow chart in Attachment C-5 must be revised to delete the option that no waste screening is required in the first column. It must also be revised to incorporate the screening for color, odor, appearance, and physical state that is required for all wastes. Additionally, column four must not allow for the option of accepting D003 waste. D003 waste may not be accepted by the facility. The application must provide a more detailed description of "perform reactivity screen". Does this mean water reactivity, compatibility testing, cyanide spot test? Compatibility screening must be conducted on all wastes.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION
. 7	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Attachment C-3 and Section D
		605(1)	
		270.14(b)(3)	
		264.13(b)(2)	

Section D-1a(2), page D-7 must be revised to make it clear that once a waste "passes testing" and the manifest is signed, it will (not may) be moved to the appropriate storage area.

With respect to Attachment C-3, also well as the other places in the application were the hazardous wastes groups list appears, it bears stating that just because a chemical is listed in this table does not mean that such a waste can be accepted at the facility. Additionally, isobutanol, hexachloroethane, and 1,1,2-trichloro-1,2,2-trifluoroethane do not appear in this table even though the facility anticipates accepting these wastes. It is not clear why reactivity group number 31, phenols and cresols, appears on the table as the facility cannot accept these wastes. The chart contained in Attachment C-3 must be revised to include reactivity group number 21. It is not clear why reactivity group number 29, which appears to correspond to hydrocarbons, aliphatic-unsaturated (includes wastes that Detrex plans to accept) is not included in the application. All of these discrepancies must be addressed.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
8	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 15 and C-16 and Attachment C-6 and Section D	The seventh paragraph on page C-15 must be revised to make it clear that, in any event, if adequate, representative sampling cannot be conducted, the waste may not be accepted.
		605(1) 270.14(b)(3) 264.13(b)(3)	occilion B	Pages C-16 must be revised to explain how and where sampling equipment decontamination will be conducted. Additionally, the second full paragraph on Page C-16 must be revised by chaning the word "may" to "will".
				Pages 9 and 10 of Attachment C-6 must be revised to reflect that the compositing process described therein has the potential to mask deviations in the properties of incoming wastes due to dilution inherent in the compositing process, and is not acceptable for any parameters. This is consistent with other revisions made to the application.
				Item 4 on page D-8 must be revised by deleting the reference to composite sampling and revising the application accordingly.
9	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(5)	Section C, pages C-9, 10, 15, and 20	The waste analysis plan eludes to a three-step generator approval process in several locations (e.g., page C-25). This process appears to be similar to the process outlined in independent submissions that the facility has recently provided to District staff for review. The appropriate forum for reviewing and approving the process is through the application. As such, the waste analysis plan must revised to clearly outline this process in the detail that has been requested by the District staff and to consistently refer to the process by a specific name or acronym [see Sections C-2d(1) and C-3a(1)-(3)]. It was also noted that the "bycategory" process was addressed under the listed wastes heading and not the other waste headings. The whole point of the "by-category" process is to account for the underlying constituents. Therefore, it is not appropriate to limit the application of the "by-category" portion of the process to just Section C-3a(2).

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
10	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1)	Section C and Section D-1	Part of the last sentence on page C-13 and the first sentence on page C-14 appears to be missing.
		270.14(b)(3) 264.13(b)(6)		With respect to the fourth paragraph on page C-5 and item 4 on page F-17, if a container to be unloaded is found to be incompatible with a container already unloaded (and presumably in the staging area), the container to be unloaded may not be moved into storage, rather it must remain on the transport vehicle until the already unloaded incompatible

process is complete.

Section C-2f(1) is not consistent with the facility's proposal to accept ignitable wastes. This discrepancy must be addressed.

waste is moved. This paragraph can not be used as an out to allow containers to be placed into storage before the screening and acceptance

Given the fact that the facility does not want to use designated storage areas (see page D-5), the application must be revised to include a description of how the various storage areas will be labeled such that personnel know what wastes are in each area, and thus are able to accurately assess compatibility concerns. If designated areas are not used, personnel will have to check all of the wastes in a given area to determine compatibility. The sentence "Only containers..." in the second paragraph on page D-5 must be revised to include the staging area. Lastly, please explain the basis for the last sentence in the third paragraph on page D-5.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION IN
11	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(6)	Section C, pages C- 17-C-25

Page C-17, paragraph 2 incorrectly refers to the "Land Band".

The fourth paragraph on page C-17 must be revised to state that the personnel will review the land disposal restriction (LDR) forms for incoming shipments of hazardous wastes as well as the manifests as is suggested on page D-13, Section D-3.

As has been previously communicated, annual LDR forms are not acceptable in Michigan (still on a per-shipment basis). Since this will change soon, it is recommended that Section C-3a be modified to state that LDR forms will be required on a per shipment basis until since time that the state law allows for annual LDR forms.

Section C-3a suggests that Detrex will consider a LDR form current if it was signed in the previous calendar year. It also suggests that LDR forms are updated in conjunction with the required annual reprofiling. Detrex is advised that annual reprofiling is considered every 365 days. Otherwise, the possibility exists for a waste profile to be conducted in January of one year and December of the following year (thus actual span of time is two years). The application must be revised to clarify the meaning of the term "annual."

With respect to Section C-3a, the application suggests that the facility will unload and begin the screening process for wastes which arrive without a LDR form, meanwhile they will be working towards obtaining an LDR form from the generator. As stated above, this is not currently allowed in Michigan. The application must be revised accordingly.

Page C-25, Section C-3b(1). This should be revised to indicate exactly how long the facility will maintain copies of the LDR forms.

Delete Section C-3d.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
12	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(c)(1)	Section C	Page C-20 suggests that if the facility encounters a discrepant waste but one the facility can still accept, they will have the generator reprofile and remanifest the waste, and provide the new information via overnight delivery. The application must be revised to clarify the location and handling of the waste until the revised paperwork has been received. The application must also be revised to make it clear that the transporter must remain on-site until all of the paperwork is received, satisfactory analytical results received, and the waste is accepted as denoted by the signing of the manifest. Page C-18, paragraph 3 states that, "in the event that an entire waste stream indicates the wastes are unacceptable as profiled and manifested, but the waste can be accepted by the Facility, the generator would be contacted and the procedure under C-2a(6) followed." The application contains no C-2a(6).
13	SECURITY	504(1)(c), .508(1)(b) 605(1) 270.14(b)(4) 264.14	Pages F-5	Section F-1 must be revised to address area 5.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
14	INSPECTION	504(1)(c), 508(1)(b)	Pages F-7 cand F-9 and Attachments F-4 and F-5	The reference to the transfer station in the second paragraph on page F-7 must be deleted.
		605(1) 270.14(b)(5) 264.15(b)		Change the word "may" to "will" in the second line in the last paragraph on page F-7.
	·	204.13(b)		Please delete Section F-2b(2).
				Attachments F-4 and F-5 must be revised to include inspection of the electronic surveillance system, consistent with the facility's existing operating license, and area 5, including the truck containment unit and the unloading/loading area.
				Attachment F-5 must be revised to include an entry for each hazardous waste storage area (including the staging area).
15	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.51	Section G	Please delete the reference to the transfer facility on page G-5.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	APPLICATION
16	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(2) 270.14(b)(7) 264.52(a) 264.56(a)(2)	Section G
		` '	

The contingency plan must be revised to specifically state that the owner or operator shall immediately notify the DEQ's Pollution Emergency Altering System (PEAS) in the event of a fire, explosion, or other release of hazardous waste or hazardous waste constituent that could threaten human health or the environment, or if the owner or operator has knowledge that a spill has reached surface water or groundwater. Specifically, the text "outside the boundaries" must be removed from the opening paragraph on page G-8 and a reference to the owner or operator having knowledge that a spill has reached surface water or groundwater added to the same paragraph. Item 1 must also include a reference to the PEAS. Item 1 in Section G-4 must be revised to include a reference to the owner or operator having knowledge that a spill has reached surface water or groundwater. Item 2.g in Section G-4a must be revised to include information concerning the disposition of any recovered material and item 2.h must be revised to delete the reference to outside the facility. The paragraph following item 5 on page G-11 must also be revised to delete the reference to outside the facility and include a reference to the owner or operator having knowledge that a spill has reached surface water or groundwater.

Since the facility no longer has any hazardous waste tank storage units, step 7 on pages G-13 and G-14 must be deleted and the remaining steps renumbered.

Attachment G-2 must be revised to also include the general number for the DEQ's Detroit Office (313-392-6500). Additionally, the 800 number listed for the DEQ's Detroit Office is not correct. The number corresponds to Marine Pollution Control's emergency response service. Therefore, Attachment G-2 must be revised accordingly.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
17	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(c)	Page G-18 and Attachment G-6	Copies of the letters transmitting the contingency plan to the various authorities that may be asked to assist in the event of an emergency, and acknowledgments if received, must be included in the contingency plan. The templates provided in Attachment G-6 are not acceptable. Once a revised contingency plan that is acceptable to the DEQ has been developed through the application review process, the arrangement of local authority letters must be sent by the facility. At that point, the letters must be included in the application.
18	PREPAREDNESS & PREVENTION	504(1)(c), 508(1)(b) 270.14(b)(8)(ii)	Page F-13	Section F-4b must be revised to delete the reference to the transfer facilty and include a reference to area 5.
19	PREPAREDNESS & PREVENTION	606 264.35	Section F	Section F-3a(2) must be revised to address the external communication system with respect to area 5. Attachment F-6 must be revised to include the location of the brooms, shovels, and hard hats. A separate existing facility layout figure must be included in this attachment. The comments regarding revision of Attachment F-6 also apply to Attachment G-4.
20	LOCATION	504(1)(c), 508(1)(b) 270.14(b)(20) 270.3	Section K	The application must be revised to include the remaining compliance letters referenced in Section K as being included in Appendix K-1.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
21	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, page I-9	Section I-1e(3) must be revised to address the decontamination of area 5, including the truck containment unit.
22	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, page I-10	More detailed information concerning the parameters to be analyzed in conjunction with any soil sampling and the associated cleanup criteria (those environmental protection criteria established pursuant to Part 201, Environmental Remediation, of Act 451, which is adopted by reference in Part 111 of Act 451 and its rules) and the process by which the extent of contamination will be verified must be included in the application. Page I-10 states that "soil samples will be collected using Method 5035." This method is suited only for the collection and preservation of VOC samples, not all soil samples. This must be corrected.
				The photoionization detector (PID) is a useful screening tool, however, it is not a substitute for laboratory analysis. Please provide specifics with respect to what constitutes a "high PID reading" and how samples for laboratory analysis will be selected.
23	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, page I-9	The parameters to be analyzed to verify extent of contamination are listed on Table 3 of Attachment I-4 but are not discussed in the text. The rationale for choosing these parameters must be addressed as part of the discussion of soil sampling procedures. Additionally, Table 3 must be reviewed to ensure that it includes all of the waste constituents for the new wastes to be accepted by the facility (see Attachment I-1).

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
24	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, pages I-9-I- 11 and Attachment I-4	The application must be revised to make it clear that the parameters and cleanup levels contained in Attachment I-4 are for wastewater analysis only in evaluating the effectiveness of the secondary containment decontamination. These cleanup levels are not for evaluating soil contamination. In particular, the lead level of 0.015 ug/L proposed is higher than the Part 201 of Act 451 drinking water standard of 0.004 ug/L. Additionally, Attachment I-4 must be revised by deleting the reference to discharging decontamination wastewater to the surface and noting that all decontamination must be conducted in a manner that prevents runon and runoff, and provides for proper collection and management of the decontamination materials.
25	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(6) 264.112(d)	Section I, Attachment I-3	The closure schedule provided in Attachment I-3 must be revised to include references to the staging area, the loading and unloading areas, and area 5, including the truck containment unit. Additionally, the reference to the Regional Administrator must be changed to the Director.
26	FINANCIAL	504(1)(c), 508(1)(b) 702(1) 270.14(b)(15) 264.142	Section I-4 and Attachment I-5	Item B in the closure cost estimate must be revised to include decontamination of area 5, including the truck containment unit.
27	FINANCIAL	508(1)(e) 703 270.14(b)(15)	Section I-5 and Attachment I-6	The application must include information concerning current financial assurance for closure.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
28	ENGINEERING	504(1)(g), 508(1)(b)	Attachment D-3	Engineering plans for both the existing facility, including all of the storage areas (including the staging area) and the loading/unloading areas, and the proposed modifications thereto must be prepared and sealed by a registered professional engineer and included in the application.
29	ENGINEERING	504(1)(g)(i), 508(1)(b)	Attachments D-3 and D-8	The engineering plans provided in Attachment D-3 must be revised to denote where the protective chemical coating to be used to make the secondary containment system sufficiently impervious will be applied in the area of the ramps and the secondary containment curb area against the exterior walls of the facility. It is not clear if the facility still plans to utilize the ramps noted in the original Attachment D-3. Information regarding the ramps and their coating was not provided, just information regarding the curbing was provided. Coating must be applied to the top of all curbs not just the internal curbing. The application must include a complete set of engineering drawings regarding the proposed redesign. The schedule included in Attachment D-8 must be revised to include a projected start date. Based on the projected start date, the DEQ will determine how best to address the proposed modifications with respect to the final licensing decision. A schedule of compliance in the license may be necessary. Additionally, the schedule must address the work associated with any base/floor/curb painting that will be done to denote the different storage areas and the work associated with labelling the different storage areas, as applicable.
30	ENGINEERING	504(1)(g)(ii), 508(1)(b)	Attachment D-3	More detailed information regarding the basis of design and materials of construction for the containment trailer than is currently provided in Attachment D-3 must be included in the application. All engineering plans must be signed and sealed by a registered professional engineer. Additionally, it is not clear what the second page in the first Attachment D-3 (note that there are currently two Attachment D-3s) represents.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
31	CONTAINERS	504(2), 508(1)(b)	Section D and Attachments D-1, 2, 3 and 6 and Section F
		614(1)(a)	
		270.15(a)(1)	

The application must be revised to further address the issue of squirt and leak protection and how the secondary containment system and facility management practices will ensure that waste squirting or leaking from a container will be contained. Specifically, the application must be revised to address the minimum distance that containers will be set back from the edge of the adjacent container storage unit, the final curb height, and the expected squirt and leak distances given the proposed configuration (supporting calculations would be helpful). This is of particular concern with respect to incompatible wastes. With respect to the statements on pages D-5 and F-16, while leaks (versus squirts) may develop in the case of a small hole, concerns still exist relative to larger holes in an "open" container, etc.

Section D-1a(3)(a) must be revised to make it clear that no new container stoarge areas may be utilized until the engineering upgrades and application of the chemical coating are certified and the certification is accepted by the DEQ.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
32	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(a)(3)	Sections D-1a(3) and (3)(c) and Attachment D-7	Without accurate engineering drawings showing the location and dimensions of each storage area (including staging area) and the secondary containment calculations in Attachment D-7 cannot be fully evaluated. Additionally, the application must address the existence of other materials that may be managed within the subject containment system and their impact on the secondary containment calculations for the hazardous wastes in the container storage area. Additionally, the updated page 2 with areas 1 and 2 and the updated page 4 with area 4 were missing from the last revision submittal.
				staging areas) must be provided in the application. The application must include information concerning the steps that the facility plans to take to insure that the approved storage process design capacity for the facility, 13,750 gallons is not exceeded should the variable storage capacity proposal be accepted.
33	CONTAINERS	270.15(e)	Section D, Page D-12	Page D-5, Section D-1 indicates that only wastes in DOT approved containers are accepted at the facility. However, page D-6, Section D-1a(2), second paragraph refers to Attachment D-4, which provides examples of DOT approvals for 'some' of the wastes which may be received at the Facility. Information must be provided for all of the wastes to be accepted at the facility. This same sentence refers to approved DOT containers as of October 1999. Information concerning current approved DOT containers must be included in the application.

STATE OF MICHIGAN



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

EE CEIN BONG "Better Service for a Better Environment" HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

REPLY TO

JANAGEMENT DIVISION

INTERNET. www deg state mi us RUSSELL J. MARDING. Director

, May 12, 2000

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Technical Review Notice of Deficiency for

Renewal Operating License Application

Detrex Corporation (Detrex), Detroit; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has completed a technical review of the renewal operating license application for the above referenced facility, which was submitted pursuant to Part 111. Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The application reviewed consists of the original application submitted on December 27, 1996, and supplemental information submitted on January 5, 2000, February 16, 2000, and April 10, 2000 and May 3, 2000 (revisions based on the MDEQ's March 7, 2000 Notice of Deficiency (NOD)).

Based on this review, the WMD has determined that the application is technically deficient. A list of the application deficiencies is enclosed. An itemized response to this letter and the enclosed NOD, along with revisions correcting the deficiencies, must be submitted to the Chief of the WMD by June 12, 2000. Failure to submit a technically adequate application is grounds for denial of the application pursuant to R 299.9518(2)(c).

When submitting revisions, please use the replacement page format for all revisions. Pages must be three-hole punched and numbered correctly so that they can be placed directly into the existing binders. The revision date must also be noted on replacement pages. The strike/underline format document that Detrex uses to highlight the revisions is very helpful, however, please confirm that all of the revisions are shown properly and that this format is removed from the copies to be inserted into existing binders. Eight collated sets of the revisions must be submitted such that they can be directly distributed to each person with an application. The MDEQ will not be responsible for collating the submittal as it did for the April 10, 2000 revision submittal.

Proposed Schedule

As we discussed previously, the WMD is scheduled to have the technical review/response process completed by July 1, 2000, a draft notice of decision regarding the application prepared by August 1, 2000, and public hearing on the proposed licensing decision by September 25, 2000. It is anticipated that a final licensing decision (issue/deny) will be rendered in October 2000.

If you have any questions, please contact me.

Sincerely,

Ronda L. Blayer

Environmental Engineering Specialist

Waste Management Division

Ronda L. Blayer

517-373-9548

Enclosures

cc/enc: Mr. Nabil Fayoumi, United States Environmental Protection Agency

Mr. Steve Buda, MDEQ Mr. John McCabe, MDEQ Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File

DETREX CORPORATION

MID 091 605 972

HAZARDOUS WASTE MANAGEMENT FACILITY RENEWAL OPERATING LICENSE APPLICATION TECHNICAL REVIEW NOTICE OF DEFICIENCY

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
1	FORM	508(1)(a)	Section A	The existing operating license and previous renewal operating license application form indicate that the coordinates for the facility are latitude 42 degrees, 23 minutes, 50 seconds and longitude 83 degrees, 10 minutes, 22 seconds not latitude 42 degrees, 23 minutes and longitude 83 degrees, 10 minutes, 199 seconds as indicated in the revised application form. This discrepancy must be resolved.
2	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b) 611(2)(c)	Section E and page A-4	If the facility is seeking a waiver from the ambient air monitoring program requirements, then the application must be revised to provide justification for such a waiver, including concurrence from the Wayne County Department of Environment, Air Quality Division, that ambient air monitoring (not a permit) is not required even though bulking activities are still conducted at the facility for off-site shipment of hazardous waste (as is stated in the waste analysis plan). Depending on the adequacy of the waiver demonstration, additionally deficiencies may be noted.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
3	PART A	504(1)(b), 508(1)(b) 270.13(h)	Attachment A-2	The application must clearly delineate between the existing facility and the proposed facility modifications (not currently licensed). Based on discussions with the facility, it is the DEQ's understanding that the proposed modifications to the facility will not likely be put into place until after the DEQ reaches a final decision on the pending application. As such, the general facility plan and associated equipment list contained herein and in many other parts of the application (Attachments A-2, B-6, D-1, E-3, F-3, F-6, G-3, G-4, G-5, and J-1) must be revised to accurately reflect the equipment present at the existing facility and the names, uses, and regulatory status thereof rather than mesh the existing facility with the proposed modifications to the existing facility. Units/areas 14, 24, and 26 appear only on some of the plans and some of the associated equipment lists and vice versa. These discrepancies must be addressed. Please also clarify that tank 6 is used for the storage of reclaimed trichloroethylene not waste trichloroethylene. The existing facility plans must also be revised to label the location of the transfer facility plans must also be revised to label the location of the transfer facility and the staging area. Consistency among the plans and equipment lists must be achieved. Everything must be clearly labeled and/or noted on the list. Attachment D-2 is where the facility plan and associated equipment list for the proposed modifications to the existing facility are currently addressed. The plan and equipment list therein must be revised to reflect the units/areas and equipment that will be in existence should the proposed modifications to the facility be approved (i.e., presense of four unique storage areas, clearly identified on the plan, with drum arrangement, etc.). The location of the perimeter security fence must also be noted on the plan.
4	PART A	504(1)(b), 508(1)(b) 270.13(k)	Attachments A-1 and A-4	Information on page A-4 suggests that the Detroit Water and Sewerage Department (DWSD) no longer requires the facility to operate under a discharge permit. However, page K-3 suggests that a pretreatment permit is still in place. Please make the necessary revisions to the application to remove such discrepancies and reflect the actual
				conditions at the facility.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
5	GENERAL	504(1)(c), 508(1)(b)	Section B	Section B must be resubmitted in non-strike/underline format.
		270.14(b)(1)		Page B-9, Section 12, must be revised to state that all of the hazardous waste storage units are enclosed within a single building which eliminates runoff. The transfer facility is a separate unit that does not require a storage operating license.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
	C&P ANALYSIS 504 508 609 270	504(1)(c), 508(1)(b) 605(1) 270.14(b)(2) 264.13(a)(1)	Section C, pages C-2-C-8 and C-16, and Attachment C-1-C-2	Section C, as well as other portions of the application, must be revised by changing the references to the federal "RCRA Part B Permit", "permit", etc. to "operating license", "license", etc., respectively, since the application is for a state hazardous waste management facility operating license under Part 111 of Act 451. The spelling of the word "treatment" must be revised in the F019 listing in Attachment C-1 as well as other places in the application where the list of hazardous wastes appears. Trichlorofluoromethane (last item listed) in Attachment C-1 is missing the designation as "toxic" or "corrosive" (T or C) after the U121 listing. Information concerning endrin, benzene, nitorbenzene, vinyl chloride, trichlorofluoromethane, 1,1,2,2,-tetrachloroethane, and 1,2,2,2-tetrachloroethane must be provided in Attachment C-2 since, per Attachment C-1, they may be included in the hazardous wastes that may be accepted at the facility. Additionally, the reference to "1,1,2-trichloro-1,2,2-trifluoromethane" must be changed to "1,1,2-trichloro-1,2,2-trifluoroethane."
				The application must be revised to address how the issues of segregation, compatibility, and secondary containment will be assessed relative to the storage of non-hazardous wastes in the hazardous waste storage areas.
				The phrase "are maintained at the Facility received at the facility to describe the" in the third paragraph on page C-6 does not make sense. The sentence containing this phrase must be rewritten.
				The reference to storage of hazardous waste "in a trailer within the dock area" on page C-7 must be deleted. Detrex is only authorized to store was in the licensed container storage units. This may refer to the transporter/transfer facility and should not be included in the application.

STATE RULES LOCATION IN FEDERAL RULES APPLICATION

COMMENT

Page C-16, Section C-2d(2), deals with waste incoming from other Detrex facilities. The presumption is that the waste profiling and approval systems will be the same or at least compatible. The application should document that the waste analysis plan systems are essentially the same and that no information is being overlooked by another Detrex facility. The DEQ will then make a determination if the proposal is acceptable.

Attachment C-1 does not include waste codes F003 and F005 (ignitable listed wastes), or waste code F004 (toxic), and the Facility does not intend to accept ignitable waste. Page C-21, Section C-3a(1), however, makes reference to generator process knowledge being used to determine if the waste is F001-F005 listed. This section should be clarified to show that the facility does not accept ignitable F003, F004, or F005 waste.

NUMBER CATEGORY

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
7	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b) and (c)	Section C and Attachment C-6

The fourth paragraph on page C-9 must be revised to state that Detrex will (not "may") ensure that samples provided by the generator are properly collected and are representative of the waste stream.

The third paragraph on page C-10 must be revised to state that the waste profile sheet and analysis, if appropriate, will be updated if inspection of the incoming hazardous waste indicates that the waste does not match the waste designated on the accompanying manifest.

The fourth paragraph on page C-10 must be revised to state that "the wastes will (not "may") be screened for parameters such as: specific gravity, flammability, pH, water reactivity, reactive cyanide, free liquids, and compatiability."

Page C-18, Section C-2e, the first line reads, "As noted in Section C-1,..." This should read "Section C-2..."

The Quality Assurance Project Plan (QAPP) provided as Attachment C-6 does not containg any discussion of how samples shipped to an off-site laboratory will be secured/sealed to prevent tampering. This information must be included in the application.

Page 6

NUMBER	CATEGORY	FEDERAL RULES	APPLICATION IN
8	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 10-C-14 and Attachment C-5
		605(1)	
		270.14(b)(3)	

The list of parameters to be evaluated for each container must be revised to include color, odor, appearance, etc. which are considered as part of the required visual inspections of each container.

Also, the application must be revised to address when additional testing may be conducted, consistent with the facility's existing operating license.

Table C-5 in Attachment C-5 must include an entry for U075 if the facility wishes to accept this waste. Additionally, page C-10 suggests that pH testing and water reactivity testing are two different tests whereas Table C-5 suggests that they are one. This discrepancy must be addressed.

With respect to the waste rejection procedures outlined on pages C-11 and C-12, the state is currently pursuing incorporation of rejected load procedures into the administrative rules promulgated pursuant to Part 111 of Act 451. A copy of the draft rules was previously provided to the facility. The new rules will likely be effective before any renewal operating license for the facility would be drafted. Therefore, it is recommended that the application be revised as necessary to conform with the pending rules. Additionally, the information provided in Section C-2a(1), items 1-6, must be revised as appropriate to clearly state when a manifest may be signed (i.e., waste accepted and the transporter allowed to leave) and where the waste is located during the various steps. Also, delete all references to the "MDEQ's procedure for partial or total rejected loads."

The application must be revised to include a copy of the form documenting the fingerprinting results, consistent with the facility's existing operating license.

Reactive cyanide is identified as a screening parameter in the last paragraph of Section C-2. However, it is not included among the list of parameters in Section C-2a and should be.

Section C-2b(3), page C-13, indicates that the facility "may" conduct pH

NUMBER CATEGORY

STATE RULES LOCATION IN FEDERAL RULES APPLICATION

COMMENT

testing as part of the fingerprint process. The application must be revised to clarify under what circumstances the facility plans to do pH fingerprint testing, or that they will do pH testing on on all incoming loads.

The list of parameters does not address characteristics which might be present in a listed waste, or identify all characteristics for any given waste stream. The facility currently relies on generator characterizations to characterize the outbound waste when they are taking generator responsibility. If the original generator characterization does not adequately address all characteristics, the facility is also in violation as a generator of 40 CFR 268.9. The facility is currently working on a plan to, in part, provide a general, "by-category" characterization which will address all characteristics for a waste stream. This application must be revised to address this issue.

NUMBER	CATEGORY	FEDERAL RULES	APPLICATION IN
9	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 12-14 and Attachments C-3 an 6 and Section D
		605(1)	
		270.14(b)(3)	
		264.13(b)(2)	

The second paragraph in Section C-2b must be revised to make it clear that the wastes cannot be accepted let alone "processed (transferred offsite)" until the sampling and analysis referenced therein are completed and the results are deemed satisfactory. This concept also applies to Sections D-1, page D-5, and D-1a(2), page D-8. The first paragraph on page D-5 and item 6 on page D-8 must be revised to make it clear that wastes cannot be accepted (which is denoted by signing the manifest and the transporter leaving the facility) until the waste screening process is completed and acceptable results are yielded. Additionally, page D-15, section D-5b states that the facility will not accept unmanifested wastes and then goes on the state what will happen "if this should occur." The application must be revised to clarify this contradiction.

Attachment C-3, also well as the other places in the application were the hazardous wastes groups list appears, must be revised to include Reactivity Group Numbers 7, 28, and 29 which correspond to amines, aliphatic and aromatic; hydrocarbons, aliphatic-saturated; and hydrocarbons, aliphatic-unsaturated, respectively. This revision is necessary since page C-6 suggests that such chemicals will be accepted at the facility.

The application must be revised to address in detail how containers in the staging area for which fingerprinting has not yet been completed are distinguished from containers in the staging area for which fingerprinting has been completed and may now be moved to the container storage unit.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
10	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 14 and C-15 and Attachment C-6	Page C-15 must be revised to explain how and where sampling equipment decontamination will be conducted.
		605(1) 270.14(b)(3) 264.13(b)(3)		The sample compositing process described in Section C-2c and elsewhere in the application has the potential to mask deviations in the properties of incoming wastes due to dilution inherent in the compositing process, and is not acceptable for any parameters. This proposed procedure must be revised to one where random samples of at least ten percent of the incoming wastes per waste type per generator are taken and analyzed as discrete samples (this applies to all parameters, including flammability/ignitability). All relevant portions of the application must be revised accordingly.
11	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(4)	Section C, Attachment C-4	Page 2 of the generator waste material profile sheet must be revised by changing "Section VI Certifications" to "Section VII Certifications."
12	12 WASTE ANALYSIS 504(1)(c), Section C and S	508(1)(b) 605(1)	Section C and Section D-1	Section D-1, page D-5, second paragraph, must be revised to clearly state that only containers with compatible waste materials will be placed in the same container storage area or in the staging area.
			The application must be revised to indicate whether the facility intends to have waste areas permanently designated to hold a specific reactivity group.	
				The next to the last paragraph on page C-17 references Section C-b4 which does not exist. Please correct this discrepancy.
				The application must include more information on how the facility plans to manage hazardous wastes that may fall into two or more reactivity groups.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
13	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(6)	Section C, page C-9	The phrase "volatile organic compound (VOC)" must be added after the "500" in the first line of the third paragraph.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION
14	WASTE ANALYSIS	504(1)(c), 508(1)(b)	Section C, pages C- 16-C-24
		605(1)	
		270.14(b)(3)	
		264.13(b)(6)	

The fourth paragraph on page C-16 and the first full paragraph on page C-17 must be revised to state that the personnel will review the land disposal restriction (LDR) forms for incoming shipments of hazardous wastes as well as the manifests as is suggested on Page D-13, Section D-3.

Page C-20, Section C-3a refers to annual LDR forms, while the third paragraph of this same section refers to annual forms as applicable under state law. Currently, annual LDR forms are not acceptable in Michigan (still on a per-shipment basis). Since this will change soon, it is recommended that the first paragraph be modified to agree with the third paragraph of this section ("as applicable under state law").

With respect to page C-20, Section C-3a, items 1 and 2, if the Facility will be correcting or completing the LDR forms under the direction of the generator, the application should be revised to describe how such changes will be recorded. Additionally, wastes cannot be accepted without the LDR form.

Page C-21, Section C-3a(2) and (3) indicates generator process knowledge will be used to determine if hazardous wastes meet the applicable treatment standards or to demonstrate that the waste has been treated by the appropriate specified treatment technology. Generator process knowledge may not always be appropriate or acceptable.

Page C-21, Section C-3a(3) refers to addressing the underlying hazardous constituents for D002 corrosive wastes. The underlying hazardous constituents should be addressed for all characteristics with a few exceptions (not just D002).

Page C-22, Section C-3b(1). This should be revised to indicate exactly how long the facility will maintain copies of the LDR forms.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
15	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(c)(1)	Section C	Page C-11, Section C-2a(1)(4) suggests that if the facility encounters a discrepant waste but one the facility can still accept, they will have the generator reprofile and remanifest the waste and provide the new information via overnight delivery. The application must be revised to clarify the location and handling of the waste until the revised paperwork has been received.
16	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(c)(2)	Section C	The sample compositing process described in Section C-2c and elsewhere in the application has the potential to mask deviations in the properties of incoming wastes due to dilution inherent in the compositing process. This proposed procedure should be revised to one where random samples of at least ten percent of the incoming wastes are taken and analyzed as discrete samples.
17	SECURITY	504(1)(c), 508(1)(b) 605(1) 270.14(b)(4) 264.14	Pages F-5	Based on the information provided in the application and observations made by DEQ staff during its February 29, 2000 visit to the facility, only the southern, eastern, and western perimeters of the facility are secured by a fence. The northern perimeter of the facility is not secured at all. Access could be made by coming down the railroad siding from either the east or west, and entering on the north side of the facility near the gravel area. The fence on the north side of the railroad siding in this area is not on facility property nor is it under the ownership or control of the facility. The application must be revised to explain how (type, location, installation schedule, etc.) the appropriate fencing will be provided so that access is completely limited on all perimeters of the facility.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
18	INSPECTION	504(1)(c), 508(1)(b)	Pages F-3 cand F-7 and Attachments F-4 and F-5	A revised Table of Contents showing the updated Section F-5 and a revised List of Attachments must be included in the application.
		605(1) 270.14(b)(5)		Please add the words "and loading and unloading area" after the words "storage areas" in the first line of the first paragraph in Section F-2.
		264.15(b)		Change the word "may" to "will" in the second line in the last paragraph on page F-7.
				Attachments F-4 and F-5 must be revised to include inspection of the electronic surveillance system, consistent with the facility's existing operating license. Also, add a specific reference to the sump pump to the weekly form in Attachment F-5.
19	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.51	Section G	Please change the federal contingency plan requirement citation in Section G-4h such that the subregulation references is lowercase, e.g., "(h)" not "(H)". Also, please change the reference to Attachment G-4 in Item 7 on page G-12 to Attachment G-5.
20	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(a)	Section G	The words "within 24 hours" in Section G-4a, item 1, must be changed to "immediately" in accordance with the appropriate regulations.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
21	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(2) 270.14(b)(7) 264.52(a) 264.56(a)(2)	Section G	The contingency plan must be revised to specifically state that the owner or operator shall immediately notify the DEQ's Pollution Emergency Altering System (PEAS) in the event of a fire, explosion, or other release of hazardous waste or hazardous waste constituent that could threaten human health or the environment, or if the owner or operation has knowledge that a spill has reached surface water or groundwater. Currently, the application only contains a specific reference to the National Response Center and situations that threaten human health outside of the facility. Items to be included in the notification to the PEAS include: the name and telephone number of the person reporting the incident; the name, address, telephone number, and EPA identification number of the facility; the name, address, and telephone number of the owner or operator; the date, time, and type of incident; the name and quantity of the material or materials involved and released; the extent of injuries, if any; the estimated quantity and disposition of recovered material that resulted from the incident, if any; an assessment of actual or potential hazardous to human health or the environment; and the immediate response action taken.
				The DEQ, Waste Management Division, Detroit Office should be added to the list of entities to be notified in the event of an emergency on Attachment G-2.
22	CONTINGENCY PLAN	504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(c)	Page G-17 and Attachment G-6	Copies of the letters transmitting the contingency plan to the various authorities that may be asked to assist in the event of an emergency, and acknowledgments if received, must be included in the contingency plan. The templates provided in Attachment G-6 are not acceptable. Once a revised contingency plan that is acceptable to the DEQ has been developed through the application review process, the arrangement of local authority letters must be sent by the facility. At that point, the letters must be included in the application.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
23	PREPAREDNESS & PREVENTION	504(2), 504(3), 508(1)(b)	Section D. Comments provided under other records.	See comments under the Containers category.
		604(1)(a), 614(1)(a), 615(1) 270.15(a), 270.16(g) 264.175(b)(4), 264.193(e)		
24	PREPAREDNESS & PREVENTION	504(1)(c), 508(1)(b)	Page F-14	Please delete the reference to Section F-5e from the last paragraph in Section F-5b.
	٠.	270.14(b)(9)		
25	PREPAREDNESS & PREVENTION	606 264.35	Section F	Attachment F-6 references air horns. Such horns are not specifically addressed in Section F of the application, however. Attachment F-6 must be revised to include the location of the drum pump, brooms, shovels, protective clothing, and hard hats. Additionally, Attachment F-6 must show the location of the main electrical disconnect (MED) as noted in the legend. There is an "ED" on the figure that may need to be corrected to "MED." The comments regarding revision of Attachment F-6 also apply to Attachment G-4.
26	LOCATION	504(1)(c), 508(1)(b) 270.14(b)(20) 270.3	Section K	The application must be revised to include the compliance letters referenced in Section K as being included in Appendix K-1. Please note that the original Section K, Other Federal Laws, has been retained as this information is required to be in an application. The new Section K, Environmental Assessment, submitted on April 10, 2000, has been moved to Section N.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
27	TRAINING	504(1)(c), 508(1)(b) 270.14(b)(12)	Section H	Page H-6 must be revised by changing the word "may" to "will" in the phrase "The following are examples of training individuals in certain job positions may receive." Please clarify the type of degree field that would be required of the "quality control coordinator." To the extent a position may serve as the emergency coordinator or the alternate emergency coordinator, the person occupying the position must receive training (not "be exposed to") in the entire contingency plan not just "appropriate components of the contingency plan." The application (see page H-6) must be revised accordingly.
28	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(1)	Section I	Pages I-4 and I-5 are identical. One of the pages must be deleted and the Section renumbered. The reference to "MDNR" in Section I-1 is not accurate and must be updated. Please provide a revised cover sheet for Attachment I-2, Facility Plan, and Attachment I-3, Closure Schedule. The order of the attachments in Section I was changed in conjunction with the last round of revisisions, however, these two cover sheets were not changed accordingly.
29	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(2)	Section I	Section I-1b must be revised to state that the DEQ will be provided with 60 days advance notice of any partial closure.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
30	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, page I-9	Section I-1e(3) must be revised by changing the word "may" in the second sentence of the second paragraph to "will".
31	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, pages I-9-I- 11	The last paragraph on page I-9 must be revised to make it clear that the decision whether or not it is necessary to conduct soil sampling underneath the container storage units and the staging area will be based on the information in outlined therein, and on consultation with and approval by the DEQ at the time of partial and/or final closure. Section I-1e(4) must be revised to state that the proposed boring locations related to the loading and unloading area must be submitted to the DEQ for review and approval prior to the initiation of sampling activities by the facility. Also, the second "may" in the last sentence on page I-9 must be changed to "will."
				More detailed information concerning the parameters to be analyzed in conjunction with any soil sampling and the associated cleanup criteria (those environmental protection criteria established pursuant to Part 201, Environmental Remediation, of Act 451, which is adopted by reference in Part 111 of Act 451 and its rules) and the process by which the extent of contamination will be verified must be included in the application. The photoionization detector (PID) is a useful screening tool, however, it is not a substitute for laboratory analysis. Please provide specifics with respect to what constitutes a "high PID reading" and how samples for laboratory analysis will be selected.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
32	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Section I, pages I-9-I-11 and Attachment I-4	Attachment I-4 must be revised to include information pertaining to trichloroethylene since it is a constituent that may be stored at the facility. Additionally, the application must be revised to make it clear that the parameters and cleanup levels contained in Attachment I-4 are for wastewater analysis only in evaluating the effectiveness of the secondary containment decontamination. These cleanup levels are not for evaluating soil contamination. In particular, the lead level of 0.015 ug/L proposed is higher than the Part 201, Environmental Remediation, of Act 451 drinking water standard of 0.004 ug/L. Additionally, Attachment I-4 must be revised by deleting the reference to discharging decontamination wastewater to the surface and noting that all decontamination must be conducted in a manner that prevents runon and runoff, and provides for proper collection and management of the decontamination materials.
33	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(6) 264.112(d)	Section I, Attachment I-3	The closure schedule provided in Attachment I-3 must be revised to include references to the staging area and the loading and unloading area.
34	CLOSURE	504(1)(c), 508(1)(b) 613(3) 270.14(b)(13) 264.115	Section I-3	Section I-3a must be revised to address certification submittals for both partial and final closure.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
35	FINANCIAL	504(1)(c), 508(1)(b) 702(1) 270.14(b)(15) 264.142	Section I-4 and Attachment I-5	Item B in the closure cost estimate must be revised to include decontamination of the staging area.
36	ENGINEERING	504(1)(g), 508(1)(b)	Attachment D-3	Engineering plans for both the existing facility, including the loading/unloading area and staging area, and the proposed modifications thereto must be prepared and sealed by a registered professional engineer and included in the application.
37	ENGINEERING	504(1)(g)(i), 508(1)(b)	Attachments D-1-D-3 and D-8	The engineering plans provided in Attachment D-3 must be revised to denote where the protective chemical coating to be used to make the secondary containment system sufficiently impervious will be applied in the area of the ramps and the secondary containment curb area against the exterior walls of the facility. It is not clear if the facility still plans to utilize the ramps noted in the original Attachment D-3. Information regarding the ramps and their coating was not provided, just information regarding the curbing was provided. Coating must be applied to the top of all curbs not just the internal curbing. The application must include a complete set of engineering drawings regarding the proposed redesign.
				The schedule included in Attachment D-8 must be revised to include a projected start date. Based on the projected start date, the DEQ will determine how best to address the proposed modifications with respect to the final licensing decision. A schedule of compliance in the license may be necessary. Additionally, the schedule must address the work associated with any base/floor/curb painting that will be done to denote the different storage areas and the work associated with labelling the different storage areas, as applicable.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
38	ENGINEERING	504(1)(g)(iii), 508(1)(b)	Attachments D-1 - D-3. Also see comments under the Containers category.	Pursuant to the agreement between the U.S. EPA and the DEQ, the state is now handling the biennial reporting program. Therefore, Section D-5 must be revised to indicate that the report will be submitted on a form and in a format approved by the DEQ.
				The facility is advised that "excessively dented" containers, as mentioned in Section D-1(a)(1)(3), would not likely be DOT approved.
39	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(a)(1)	Section D-1a(3) and Attachments D-1, 2, 3, and 6	The application must be revised to address the issue of squirt protection and how the secondary containment system and facility management practices will ensure that waste squirting from a container will be contained. This is of particular concern with respect to incompatible wastes. *jmn Page D-9, Section D-1a(3)(a) refers to application of an impermeable coating to the secondary containment system. They provide two examples and then say 'or some other suitable coating.' Do we want to know specifically what coatings they will use?
40	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(a)(3)	Sections D-1a(3) and (3)(c) and Attachment D-7	The application must contain a more detailed description of how the secondary containment for container storage area #4 was determined. It is not clear from the calculations what areas are being relied upon to provide the necessary secondary containment. The application must also address the secondary containment system for the staging area. Additionally, the application must address the existence of other materials that may be managed within the subject containment system and their impact on the secondary containment calculations for the hazardous wastes in the container storage area. It would help if Attachment D-2 had areas 1-4 clearly labeled thereon.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
41	CONTAINERS	504(2), 508(1)(b) 614(1)(a) 270.15(d)	Section D-1a(2)	The application must be revised to include specific details regarding the procedures to be used to comply with 40 CFR 264.17 and 264.177.
42	CORRECTIVE ACTION	504(1)(c), 508(1)(b) 270.14(d)(1)(i)	Section J, page J-4 and Attachment J-1	The list of waste management units at the facility must be expanded to include the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility (as noted in the existing application).
43	CORRECTIVE ACTION	504(1)(c), 508(1)(b) 270.14(d)(1)(ii)	Section J, pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application
44	CORRECTIVE ACTION	504(1)(c), 508(1)(b) 270.14(d)(1)(iii)	Section J, pages J-4 and J5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.
45	CORRECTIVE ACTION	504(1)(c), 508(1)(b) 270.14(d)(1)(iv)	Section J, pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.

NUMBER	CATEGORY	STATE RULES FEDERAL RULES	LOCATION IN APPLICATION	COMMENT
46	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Section J, pages J-4 and J-5	Specific information regarding the loading/unloading area, the transfer station, any existing generator accumulation units, and the fill unit underlying much of the facility must be included in the application.
		270.14(d)(1)(v)		
47	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Section J, Page J-5	More detail regarding the releases referenced in Section J-2A must be provided.
		270.14(d)(2)		
48	CORRECTIVE ACTION	504(1)(c), 508(1)(b)	Section J	The application must be revised to include the results of investigations regarding the impact of the existing waste management units, including fill material underlying the facility, on the environment that have been
		270.14(d)(3)		conducted to date. The facility was required to conduct such investigations under the federal Hazardous and Solid Waste Amendments permit that was issued concurrently with the facility's existing operating license. However, no information concerning these investigations is provided in the application. This deficiency may be expanded at a later time depending on the response to the previous item concerning more detail about the three releases stated to have occurred at the facility.





-P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803 LILERY .

ECENVEMAN 0 3 2000

May 1, 2000

Ronda Blayer MDEQ, Waste Management Division 608 W. Allegan John Hanna Building, 1st Floor Lansing MI 48933 VIA: Certified Mail

RE:

Part B Permit Application

Detrex Corporation-Solvents Division

12886 Eaton Ave.

Detroit ML_48227_

EPA ID # MID 091 605 972

Dear Mrs. Blayer:

As promiced in my letter dated April 6th, enclosed are the following items to complete the Part B Permit Application submission:

MNOHWI PERMIT SECTION WMB

MNUMWI PEKMII SECTION WIND MNUMWI PESIICIDE Waste U.S. EPA RF. GION 5

Attachment A-2

Attachment D-1

Attachment D-2

Attachment E-3

Certification Statement by a Professional Engineer

If you should have any questions or need additional information, please feel free to give me a call.

Sincerely,

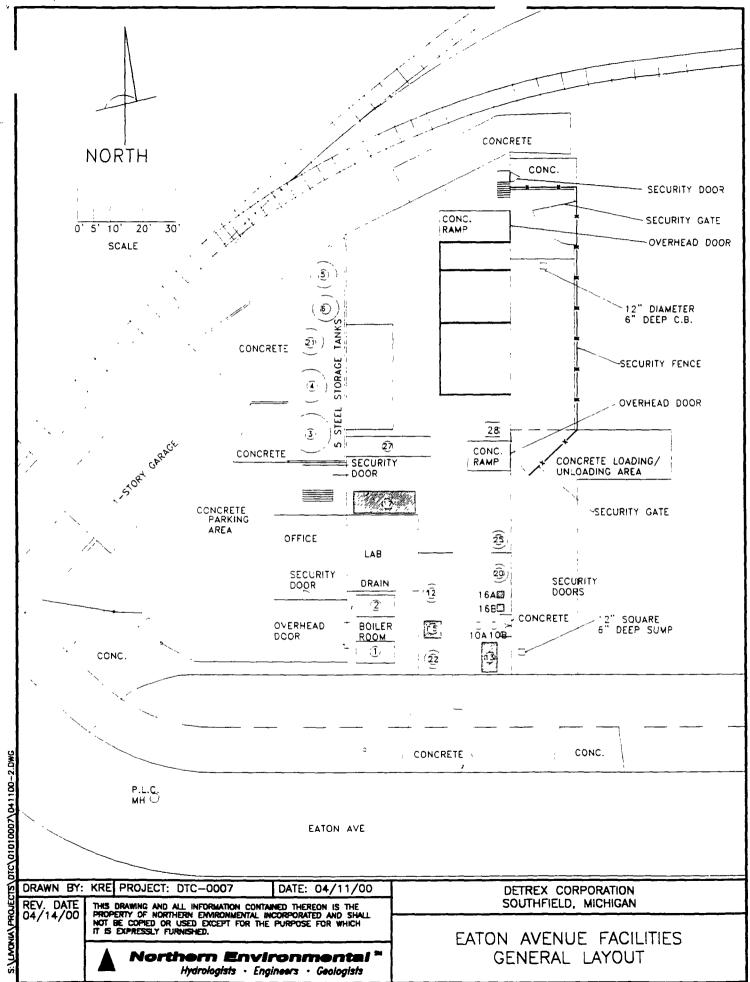
David Craig, CHMM, CET

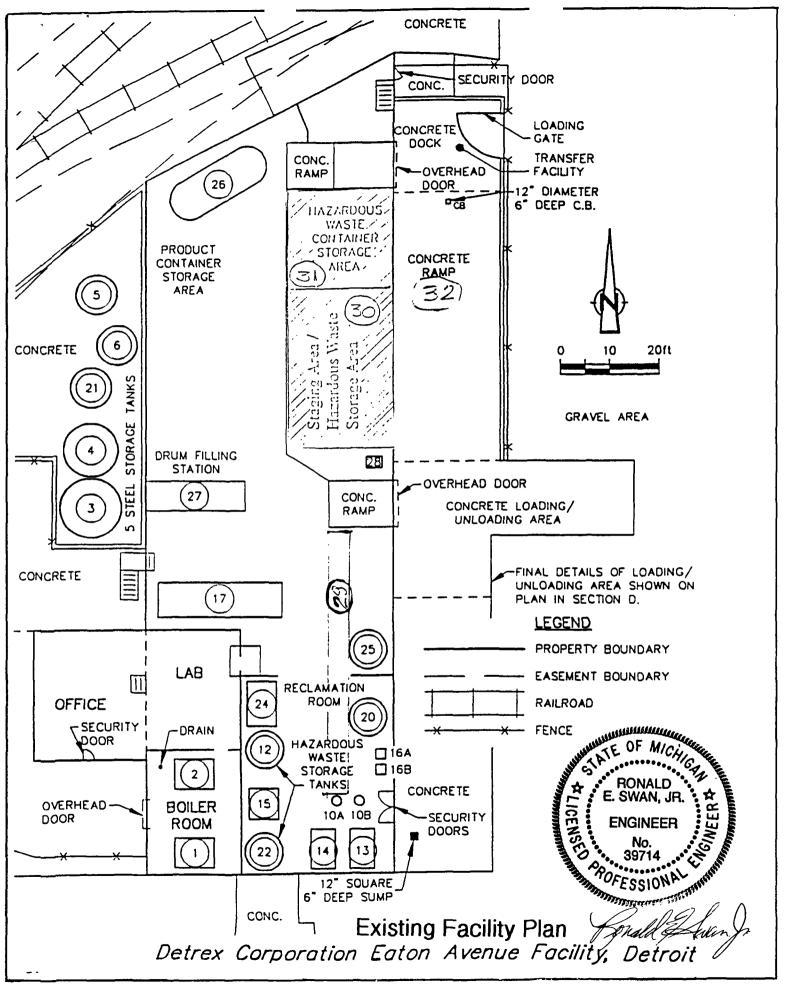
Manager of Environmental and Safety Compliance

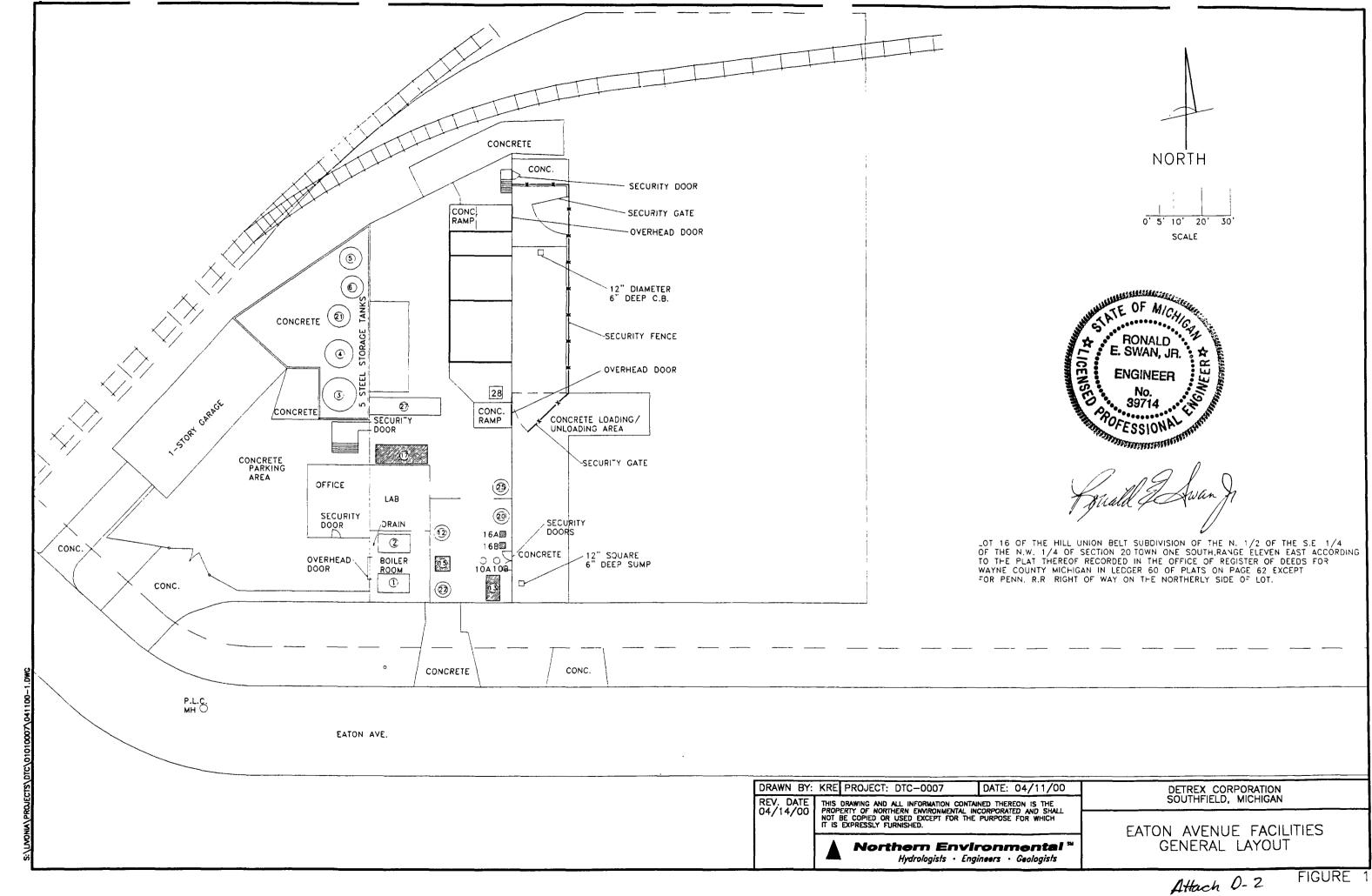
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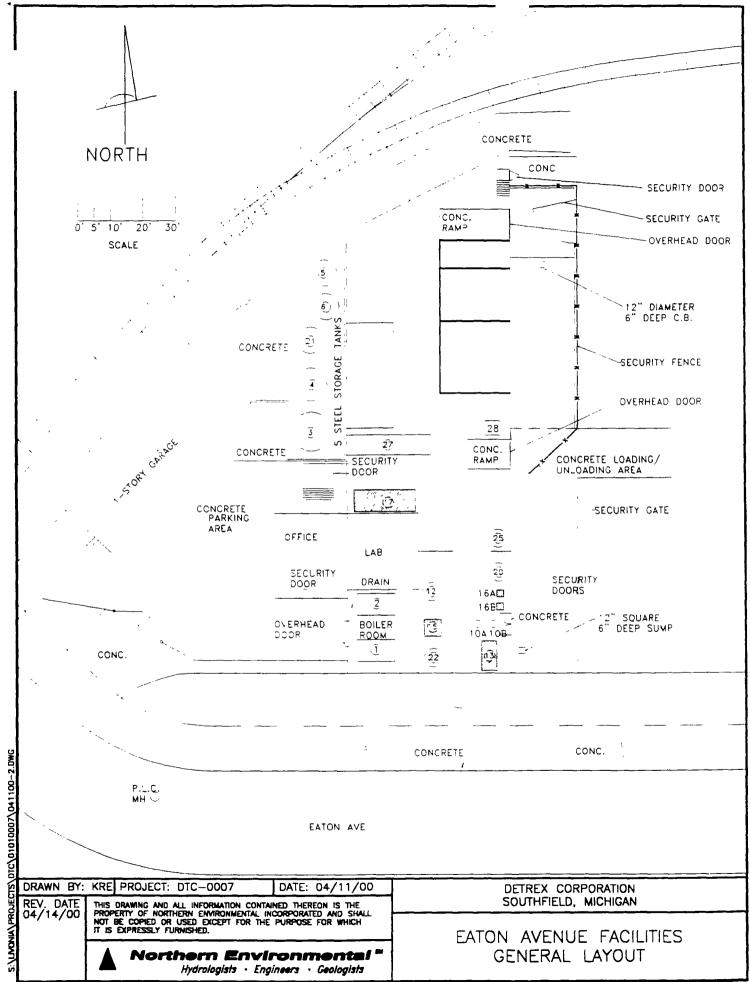
File

Facility









Date: 04/01/00 Revision: 00-1 Page: M-2

CERTIFICATION OF CAPABILITY

I certify under penalty of law that, based upon my review of the information presented in this document, and my inquiry of those directly responsible for gathering this information, to the best of my knowledge and belief the Detrex Corporation Solvents and Environmental Services Division facility located at 12886 Eaton Avenue in Detroit Michigan is capable of handling and storing hazardous wastes in accordance with the applicable environmental, human health, location and facility design and operating standards outlined in Part 111 of the Michigan Act 451. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Independent Professional Certification:

Signature:

Name:

Ronald E. Swan, Jr. CHI

Company: Northern Environmental Technologies, Inc.

Professional Engineer

State Registration No. 39714

Company Official Certification:

Signature:

David R. Crandell

Name: Company: Detrex Corporation



JOHN ENGLER, Governor

REPLY TO

PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION

"Better Service for a Better Environment" HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

> INTERNET www.deg state milus RUSSELL J. HARDING, Director

> > March 7, 2000

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Completeness Review and Partial Technical Review Notices of Deficiency for

Renewal Operating License Application Detrex Corporation, Detroit; MID 091 605 972

The Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD), has finished a completeness review of the renewal operating license application for the above referenced facility, which was submitted pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The application reviewed consists of the original application submitted on December 27, 1996, and supplemental information submitted on January 5, 2000, and February 16, 2000.

Completeness Review

Based on this review, the WMD has determined that the application is incomplete. A list of the application completeness deficiencies is enclosed. A response to this letter, along with revisions correcting the deficiencies, must be submitted to the Chief of the WMD by April 7, 2000. Failure to submit a complete application is grounds for denial of the application pursuant to R 299.9518(2)(c).

When submitting revisions, please use the replacement page format. Pages should be threehole punched and numbered correctly so that they can be placed directly into the existing binders. It is also helpful if the revision date is noted on replacement pages. Eight copies of the revisions must be submitted.

Partial Technical Review

As discussed with you at our February 29, 2000 meeting regarding the application, the WMD has also finished a partial technical review of the application. A list of the technical deficiencies identified to date is also enclosed. The partial technical Notice of Deficiency (NOD) is being forwarded to you at this time in an effort to provide the facility with advance notice of some of the deficiencies. Additional technical deficiencies may follow based on a review of the remainder of the application and the information submitted in response to the completeness NOD referenced above. To the extent possible, the WMD recommends addressing the technical deficiencies identified to date, in conjunction with the completeness review/response process. All revisions



based on the technical NOD must be submitted using the replacement page format noted above.

Please be advised that a response to the technical NOD is not formally required until a complete application is received by the WMD and the WMD has conducted a full technical review of the complete application.

Proposed Schedule

As we discussed previously, the WMD plans to have the technical review/response process completed by July 1, 2000 (assuming a complete application is received by the WMD), and a draft notice of decision regarding the application available by August 1, 2000. It is anticipated that a final licensing decision (issue/deny) will be rendered in October 2000.

If you have any questions, please contact me.

Sincerely,

Konda L. Blayer Ronda L. Blayer

Environmental Engineering Specialist

Waste Management Division

517-373-9548

Enclosures

cc/enc: Mr. Nabil Fayoumi, United States Environmental Protection Agency

Mr. Steve Buda, MDEQ Mr. John McCabe, MDEQ Mr. Ron Stone, MDEQ

Ms. Jeanette Noechel, MDEQ - Detroit

Operating License File

DETREX CORPORATION

MID 091 605 972

HAZARDOUS WASTE STORAGE FACILITY RENEWAL OPERATING LICENSE APPLICATION AMBINISTRATIVE COMPLETENESS REVIEW NOTICE OF DEFICIENCY

The titleholder of the land upon which the facility is located is required to sign a certification statement regarding the validity of the information included in the application. The application must be revised to include such a statement. Completion of the application form referenced above will satisfy this requirement.	Debuloni foM noifsoilqqs ni	508(3) 270.11(d)	CERTIFICATION	ζ
COMMENT The application must be accompanied by a completed application form provided by the Director. A copy of the appropriate application form was provided to the facility during its February 29, 2000 meeting with the Michigan Department of Environment of Quality (MDEQ).	LOCATION IN A MOITACHION A moitse8	STATE RULES FEDERAL RULES 508(1)(a)	CATEGORY FORM	NUMBER 1

NUMBER 3	CATEGORY CERTIFICATION OF CAPABILITY	STATE RULES FEDERAL RULES 508(1)(d)	LOCATION IN APPLICATION Not included in application	COMMENT The application must be revised to include a certification statement regarding the storage facility's capability of managing hazardous waste in accordance with Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) and its rules. The certification statement must be prepared, signed, and sealed by a registered professional engineer.
4	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b) 611(2)(c)	Section E and page A-4	If the facility is seeking a waiver from the ambient air monitoring program requirements, then the application must be revised to provide justification for such a waiver, including concurrence from the Wayne County Department of the Environment that ambient air monitoring is not required even though bulking activities are still conducted at the facility for off-site shipment of hazardous waste (as is stated on page C-7).
5	ENVIRONMENTAL MONITORING	504(1)(f), 508(1)(b) 611(2)(d)	Section E	The application must be revised to include a schedule for, and specifics on, the modifications to the loading/unloading area referenced on page E-9. Appropriate engineering information must also be included in accordance with R 299.9504(1)(g).

NUMBER 6	CATEGORY ENVIRONMENTAL ASSESSMENT	STATE RULES FEDERAL RULES 504(1)(e), 508(1)(b)	LOCATION IN APPLICATION Not included in application	COMMENT The application must be revised to include an environmental assessment.
7	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(4)	Pages C-9, C- 10, C-15, and C-20	The recertification letter referenced in the waste analysis plan is not contained in Attachment C-4 as indicated. The letter must be incorporated into the application.
8	WASTE ANALYSIS	504(1)(c), 508(1)(b) 605(1) 270.14(b)(3) 264.13(b)(6)	Not included in application	Information regarding the methods for determining organic content measurement to comply with 40 Code of Federal Regulations (CFR) 264.1083 must be included in the application.
9	INSPECTION	504(1)(c), 508(1)(b) 605(1) 270.14(b)(5) 264.15(b)(4), 264.1088	Not included in application	The application must be revised to address the inspection requirements required pursuant to 40 CFR Part 264, Subpart CC.

NUMBER 10	CATEGORY CONTINGENCY PLAN	STATE RULES FEDERAL RULES 504(1)(c), 508(1)(b) 607(1) 270.14(b)(7) 264.52(c)	LOCATION IN APPLICATION Page G-18 and Attachment G-6	COMMENT Copies of the letters transmitting the contingency plan to the various authorities that may be asked to assist in the event of an emergency, and acknowledgments if received, must be included in the contingency plan. The templates provided in Attachment G-6 are not acceptable. Once a revised contingency plan that is acceptable to the MDEQ has been developed through the application review process, the arrangement of local authority letters must be sent by the facility. At that point, the letters must be included in the application.
11	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(4)	Page I-9	Information concerning the parameters to be analyzed in conjunction with any soil sampling, related methodology, and the cleanup criteria must be included in the application.
12	CLOSURE	504(1)(c), 508(1)(b) 613(1) 270.14(b)(13) 264.112(b)(6) 264.112(d)	Section I-1d and Attachment I-4	Attachment I-4 is missing from the application and must be provided.

		STATE RULES	LOCATION IN	
NUMBER	CATEGORY	FEDERAL RULES	APPLICATION	COMMENT
13	GENERAL	504(1)(c), 508(1)(b)	Section B-2A and Attachments B-1 - B-8	The facility plan in Attachment B-6 must be revised to accurately reflect the equipment present and its name, uses, and regulatory status. For example, the references to drying columns, stills, and hazardous waste storage tanks suggest that this equipment is still in use. It is the MDEQ's understanding that the distillation equipment is
		270.14(b)(19)		no longer in use. The two former hazardous waste storage tanks have been certified closed and may no longer be used for storage of hazardous waste. It is not clear whether the referenced equipment is still present at the facility. Additionally, "the staging area" must be shown on the facility plan. The transfer facility must also be labeled as such on the plan.
14	ENGINEERING	5Q4(1)(g), 508(1)(b)	Attachment D-3	Engineering plans for both the existing facility, including the loading/unloading area and staging area, and the proposed modifications thereto must be prepared and sealed by a registered professional engineer and included in the application.
15	ENGINEERING	504(1)(g)(i), 508(1)(b)	Attachments D-1 - D-3	The engineering plans provided in Attachment D-3 must be revised to denote where the protective chemical coating to be used to make the secondary containment system sufficiently impervious will be applied in the area of the ramps and the secondary containment curb area against the exterior walls of the facility. Additionally, the application must provide a detailed schedule regarding the proposed modifications to the facility.





P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (248) 358-5800 • FAX (248) 358-5803

January 4, 2000

Ronda Blayer MDEQ, Waste Management Division 608 W. Allegan John Hanna Building, 1st Floor Lansing MI 48933 VIA: UPS

RE:

Part B Permit Application
Detrex Corporation- Solvents Division
12886 Eaton Ave.
Detroit MI 48227
EPA ID # MID 091 605 972

Dear Mrs. Blayer:

In December of 1996, Detrex Corporation submitted a Part B Permit Renewal Application to the MDEQ. As per our phone conversations during December of last year, it is my understanding that MDEQ plans to begin the process of reviewing our Hazardous Waste renewal application beginning this month. To accommodate changes to operations at the facility, Detrex is resubmitting our Part B Permit Application to address these changes.

To reduce the amount of paperwork required for this submission, Detrex is providing just those sections of the application which have changed since the 1996 submission. The attached table will define what sections or attachments are affected by this submission. As requested, 10 (ten) copies of the renewed sections are enclosed for your review and distribution.

If you should have any questions, or need additional information please feel free to give me a call.

Sincerely,

David Craig, CHMM, CET

Manager of Environmental and Safety Compliance

CC:

File

Facility

EATON AVE. PERMIT APPLICATION 1999

SECTION	KEEP /REPLACE
A	R
Appendix A-1	K
Appendix A-2	K
Appendix A-3	K
Appendix A-4	K
Appendix A-5	K
В	R
Appendix B-1	K
Appendix B-2	<u>K</u>
Appendix B-3	K
Appendix B-4	<u>K</u>
Appendix B-5	<u>K</u>
Appendix B-6	<u>K</u>
Appendix B-7	<u>K</u>
Appendix B-8	, K
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<u> </u>	R
Appendix D-1	<u>K</u>
Appendix D-2	<u>K</u>
Appendix D-3	. R
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Appendix D-5	<u>R</u>
Appendix D-6	<u>K</u>
Appendix D-7	- R
Appendix D-8	<u>D</u>
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Appendix E-1	K
Appendix E-1 Appendix E-2	K
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Appendix F-1	R
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Appendix F-3	K
Appendix F-4	R
Appendix F-5	R
Appendix F-6	R
Appendix F-7	R
G	l R
Appendix G-1	R
Appendix G-2	R
Appendix G-3	K

K = KEEP

R = REPLACE

D = DELETE

EATON AVE. PERMIT APPLICATION 1999

SECTION	KEEP/REPLACE
Appendix G-4	R
Appendix G-5	
Appendix G-6	R
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Appendix H-1	<u>R</u>
Appendix H-2	R
Appendix H-3	R
Appendix H-4	K
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Appendix I-1	
Appendix I-2	R
Appendix I-3	K
Appendix I-4	K
Appendix I-5	R
Appendix I-6	R
Appendix I-7	R
J	R
Appendix J-1	K
Appendix J-2	K

STATE OF MICHIGAN



JOHN ENGLER, Governor

REPLY TO

WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www deq state mi us
RUSSELL J. HARDING, Director

March 12, 1999

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation, Detroit, MID 091 605 972

The Department of Environmental Quality (DEQ), Waste Management Division (Division), has reviewed your March 3, 1999 letter to Ms. Ronda L. Blayer, requesting modification of the above referenced facility's June 29, 1992 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The request addressed the waste analysis plan. Based on a review of the modification request, supplemental information provided to Ms. Blayer on March 8, 1999, the current operating license, the administrative rules promulgated pursuant to Part 111 of Act 451 (Part 111 rules), and discussions with Division district staff, the Division hereby approves the requested modifications. Copies of the modified pages of the operating license, as approved by the Division, are enclosed. Please be sure that the appropriate pages of your operating license are replaced accordingly. In accordance with R 299.9519(6)(b) of the Part 111 rules, the Detrex Corporation is required to send a notice of the minor modifications to all persons on the facility mailing list and the appropriate units of state and local government. Such notice must be provided within 90 calendar days after the changes are put into effect.

If you have any questions, please contact Ms. Blayer, at 517-373-9548, or you may contact me.

Jim Sygo, Chief

Waste Management Division

⁷517-373-9523

Enclosures

cc: Mr. Steve Buda, DEQ cc/enc: Mr. Todd Gmitro, United States Environmental Protection Agency

Ms. Jeanette Noechel, DEQ - Detroit

Ms. Ronda L. Blayer, DEQ Operating License File

STATE OF MICHIGAN



JOHN ENGLER, Governor

REPLY TO

DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION PO BOX 30241

"Better Service for a Better Environment" WASTE MANAGEMENT DIVISION PO BOX 30241

LANSING MI 48909-7741

"Better Service for a Better Environment"
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www deq state mi us RUSSELL J. HARDING, Director

June 26, 1998

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation, Detroit, MID 091 605 972

The Department of Environmental Quality (DEQ), Waste Management Division (Division), has reviewed your November 17, 1997 letter to Ms. Ronda Blayer, requesting modification of the above referenced facility's June 29, 1992 hazardous waste management facility operating license, which was issued pursuant to Part 111. Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The request addressed the waste analysis plan and the deletion of two of the parameters, compatibility and gas chromatography, associated with the waste screening process and the deletion of references to operations no longer conducted at the facility. Based on a review of the modification request, supplemental information provided on June 8, 1998, to Ms. Blayer, the current operating license, existing facility operations (container storage only), the administrative rules promulgated pursuant to Part 111 of Act 451 (Part 111 rules), and discussions with Division district staff, the Division hereby approves the requested modifications with one amendment. Table C-1 on page C-9 of the waste analysis plan has been amended to delete the reference to the process code for tank storage (S02). Copies of the modified pages of the operating license, as approved by the Division, are enclosed. Please be sure that the appropriate pages of your operating license are replaced accordingly. In accordance with R 299.9519(6)(b) of the Part 111 rules, Detrex Corporation is required to send a notice of the minor modifications to all persons on the facility mailing list and the appropriate units of State and local government. Such notice must be provided within 90 calendar days after the changes are put into effect.

If you have any questions, please contact Ms. Blayer, at 517-373-9548, or you may contact me.

DECEIVED

JUL 0 1 1998

DIVISION FRONT OFFICE Waste, Pesticides & Toxics Division U.S. EPA - REGION 5 Jan 3

Sincerely.

Jim Sygo, Chief

Waste Management Division

5/17-373-9523

Enclosures

cc: Mr. Steve Buda, DEQ

cc/enc: Market Civilian States Environmental Protection Agency

Ms. Jeanette Noechel, DEQ-Detroit

Ms. Ronda L. Blayer, DEQ Operating License File



JOHN ENGLER, Governor

REPLY TO:

WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment" HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-X923

INTERNET: www.deg.state.mi.us RUSSELL J. HARDING, Director

Mr. David Craig, CHMM, CET Manager of Environmental and Safety Compliance **Detrex Corporation** P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Minor Modification of Operating License

Detrex Corporation, Detroit, MID 091 605 972

The Department of Environmental Quality, Waste Management Division (Division), has received your September 11, 1997 letter and Mr. Ronald C. Hritzkowin's December 8, 1997 letter notifying the Division of changes regarding the recertification letter associated with the hazardous waste profile and sheet, and the emergency coordinator personnel for the referenced facility. These changes consitute a minor modification to the June 29, 1992 hazardous waste management facility operating license, which was issued pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). As outlined in R 299,9519(5)(b)(x) and (9), prior approval of these minor modifications is not required. The purpose of this letter is to acknowledge receipt of the minor modification notices from Detrex Corporation (Detrex).

In accordance with R 299.9519(6)(b) of the administrative rules promulgated pursuant to Part 111 of Act 451, Detrex is required to send a notice of these minor modifications to all persons on the facility mailing list and to the appropriate units of state and local government. Such notice must be provided within 90 calendar days of the date that the changes were put into effect.

If you have any questions, please contact Ms. Ronda L. Blayer of my staff, at 517-373-9548, or me.

∦m Sygo, **¢hi**ef

Waste Management Division

517-373-9523

ncerely

cc: Mr. Todd Gmitro, U.S. EPA Mr. Steve Buda, DEQ Ms. Ronda L. Blaver, DEQ

Dr. Ben Okwumabua\Ms. Jeanette Noechel, DEQ - Southeast Michigan

Operating License File





CORPORATION

P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (810) 358-5800 • FAX (20) 558-5803

FEB 1 8 1997

DIVISION FRONT OFFICE

Waste, Pesticides & Toxics Division

U.S. EPA - REGION 5

February 14, 1997

Mr. Hak Cho USEPA, Region 5 77 West Jackson Boulevard Chicago IL 60604

RE:

Hazardous Waste Permit Renewal -Detrex Corporation Indianapolis IN 46241 EPA ID# IND 085 616 837

Dear Mr. Cho:

During a review of our most recent submittal of the Permit Renewal Application it was brought to our attention that a minor error existed in the Part A Application. Attached is a revised page. The change involves the number of units shown under process code T04, these were addressed in the text but not in the application.

If you should have any further questions please feel free to give me a call.

Sincerely,

David Craig, CHMM, CET

Manager of Environmental and Safety Compliance

CC:

File

Facility

S. Miles - Detrex

Enclosure: Page 3 of Part A Application

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XI Nature of B	usiness (Provi	de a brief d	escription)							

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XII: Process Codes and Design Capacities -EXAMPLE FOR COMPLETING ITEM XII (Shown in line number X-1 below): A facility has a storage tank, which can hold A SAME TO THE PARTY OF THE PART 533.788 gallons Tinew A. Process B. PROCESS DESIGN CAPACITY **- 100** C.Process Milmber Code Total 2. Unit of 'Number " - 1. Amount (Speelly) Measure THE PERSON NAMED IN COLUMN Of Units ... (Entercode) 5 3 3 7 8 数1 0 2 Š G. 0 0 1 S = 0002 22.000 G 2: TO 002 10 500 U 3. 6 8 9 4.4.4 1 0 1 1 <u>ال</u>م 2 1. 3

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XIII Process Codes and Design Capacities

EXAMPLE FOR COMPLETING ITEM XII (Shown in line number X-1 below): A facility has a storage tank, which can hold

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NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, 899, T04 and X99) in item XIII. (i.e., D99, 899, T04 and X99) in item XIII.

XIII. Other Processes (Follow instructions from item XII for D99, S99, T04 and X99 process codes)

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P.O. BOX 5111 • SOUTHFIELD, MI 48086-5111 • (810) 358-5800 • FAX (810) 358-5803 December 20, 1996

Ronda Blayer MDEQ, Waste Management Division 608 w. Allegan John Hanna Building, 1st Floor Lansing MI 48933

RE:

Part B Permit Renewal Application 12886 Eaton Ave. Detroit MI EPA ID # MID 091 605 972

Dear Ms. Blayer:

In compliance with ACT 64 Rule 299.9601 & 40 CFR 270.10 Detrex Corporation is submitting 8 copies of the Part B Permit Renewal Application for our Eaton Ave. facility. Enclosed with this letter is the original Part A Application with original signatures, the owner operator statement with original signatures, and a check made payable to the State of Michigan for the amount of \$500.00.

If you have any questions, or if I have misrepresented any portion of our phone conversation please feel free to give me a call.

Sincerely,

David Craig

Manager of Environmental and Safety Compliance

CC:

File

S. Miles - Detrex





June 13, 1996

Ronda L. Blayer Senior Environmental Engineer Hazardous Waste Permits Section Waste Management Division P. O. BOX 30241 Lansing, MI 48909

RE: Detrex Corporation 12886 Eaton Ave. Detroit, MI 48227 EPA ID # MID 091 605 972

Dear Ms. Blaver:

The Detrex Corporation Solvents Division Facility currently operates as a treatment, storage and disposal (TSD) facility under a hazardous waste facility permit.

As of June 1996, Detrex will discontinue the operation of the solvent recovery distillation units at the Detrex Corporation solvents Division Facility located at 12886 Eaton Ave. in Detroit, Michigan.

The Solvent recovery (recycling) system at the solvents division facility consists of four separate distillation units (#13, 14, 24, 25). The hazardous waste distillation units consists of two Stills, two DCI, and associated piping used in the recovery (recycling) distillation units.

Process Equipment Description:

350 gallon Detrex Still model S-350 (unit #13). Used for recovering chlorinated solvents from spent solvents from degreasing operations (F001) via distillation.

350 gallon Detrex Still model S-600 (unit #14). Used for recovering chlorinated solvents (F001) via distillation.

500 gallon DCI Still model DYNA-1-100 solvent recovery still (unit #24). Used to recover chlorinated solvents (F002) via steam injection.

500 gallon DCI Still model DYNA-1-500 solvent recovery still (unit #25). Used to recover chlorinated solvents (F002) via steam injection.

The solvent recovery process equipment is not regulated under the facility's RCRA Part B Permit. Therefore, a formal closure plan is not required to be submitted and approved by the MDEQ. A formal closure plan will be submitted for the hazardous waste storage tanks. The hazardous waste feed

tanks (# 12 & # 13) will be utilized temporary for storage of F001 and F002 waste until partial closure work plan have been approved by MDEQ.

Please feel free to contact me if you have any questions or comments regarding the closure of the recovery system. Thank you for your time and attention.

Sincerely,

Hani Hamawi Project Manager

CC:

David Crandell, Detrex
David Craig, Detrex
Mike Farrell, WCDOE
Ron Hirtzkowin, Detrex
Stan Miles, Detrex
Jeanette M. Noechel, MDEQ
Issa Shamiyeh, Detrex
Tom Shones, WCDOE



JOHN ENGLER, Governor

REPLY TO:

WASTE MANAGEMENT DIVISION PO BOX 30241 LANSING MI 48909-7741

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

RUSSELL J. HARDING, Director

February 7, 1996

Dario Craig, CHMM, CET

Manager of Safety and Environmental Compliance

Detrex Corporation

P.O. Box 5111

Southfield, Michigan 48086-5111

Dear Mr. Craig:

SUBJECT: Approval of Operating License Modification Request

Detrex Corporation, Detroit, MID 091 605 972

The Michigan Department of Environmental Quality, Waste Management Division (Division), has reviewed your February 1, 1996 request for modification of the above referenced facility's June 29, 1992 hazardous waste management facility operating license which was issued pursuant to Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). The request for modification addressed the waste analysis plan, waste handling procedures, daily hazardous waste inspection record, and facility drawings and associated legends. Based on a review of the modification request, the facility's existing operating license, and the hazardous waste management program administrative rules promulgated pursuant to Part 111 of Act 451, the Division hereby approves the requested modifications. Copies of the modifications to the operating license as approved by the Division along with a list of the impacted pages of the operating license are enclosed to ensure that the appropriate pages are replaced accordingly.

In accordance with R 299.9519(6)(b) of the Part 111 administrative rules, Detrex is required to send a notice of these minor modifications to all persons on the facility mailing list and to the appropriate units of state and local government. Such notice must be provided within 90 calendar days of this approval. A copy of the facility mailing list is enclosed for your use.

If you have any questions, please contact Ms. Ronda L. Blayer of my staff at telephone number 517-373-9548, or me.

im Sygo Chief

Waste Management Division

517-373-9523

Enclosures

cc:

Mr. Steve Buda, MDEQ

Ms. Ronda L. Blayer, MDEQ w/enc.

Dr. Ben Okwumabua/Ms. Jeanette Noechel, MDEQ - Livonia w/enc.

Operating License File w/enc.

LIST OF PAGES IMPACTED BY OPERATING LICENSE MODIFICATIONS

- 1. Part III Storage in Containers
 - A. Pages 16 to 18
- 2. Attachment 1, Waste Analysis Plan
 - A. Pages C-1 to C-16
 - B. Supplement to Attachment C-1, General Annual Waste Stream Verification Letter
- 3. Attachment 2, Inspection Schedule
 - A. Attachment F-3, Daily Hazardous Waste Inspection Record
- 4. Attachment 4, Contingency Plan
 - A. Attachment G-1, Facility Plan, and page 2 of list of process equipment
 - B. Attachment G-3, Location of Emergency and Safety Equipment
 - C. Attachment G-4, Evacuation Routes
- 5. Attachment 5, Closure Plan
 - A. Attachment I-1, Facility Plan, and page 2 of list of process equipment
 - B. Attachment I-3, Decontaminated Area
- 6. <u>Attachment 7, Facility Drawings, and Engineering Plans and Specifications</u>
 - A. Drawing 7-3 and Page 2 of list of process equipment
 - B. Drawing 7-4

PART III

CONDITIONS FOR STORAGE IN CONTAINERS

A. COVERAGE OF LICENSE

- 1. The hazardous waste container storage areas denoted as the hazardous waste container storage area (area number 31), the staging area/hazardous waste storage area (area number 30), and the temporary storage area (area number 29) on Drawing 7-3 are covered by this license. Any expansion or enlargement beyond the facility boundary shown on Drawings 7-1 and 7-2 or beyond the 8,250 gallon storage design capacity requires a construction permit from the Director.
- 2. Drawings 7-1, 7-2, 7-3, and 7-4 are incorporated into this license as Attachment 7.

B. WASTE IDENTIFICATION AND QUANTITY

- 1. The licensee may store no more than a total volume of 8,250 gallons of the hazardous wastes listed in Attachment 8 in a maximum of 150 55-gallon containers, or an equivalent volume in other size containers, at the facility, subject to the terms of this license.
- 2. The licensee may store no more than a total volume of 990 gallons of the hazardous wastes listed in Attachment 8 in a maximum of 18 55-gallon containers, or an equivalent volume in other size containers, in the temporary storage area (area number 29), subject to the terms of this license.
- 3. The licensee may store no more than a total volume of 4,125 gallons of the hazardous wastes listed in Attachment 8 in a maximum of 75 55-gallon containers, or an equivalent volume in other size containers, in the staging area/hazardous waste storage area (area number 30), subject to the terms of this license.
- 4. The licensee may store no more than a total volume of 3,135 gallons of the hazardous wastes listed in Attachment 8 in a maximum of 57 55-gallon containers, or an equivalent volume in other size containers, in the hazardous waste container storage area (area number 31), subject to the terms of this license.

C. CONTAINER STORAGE TIME LIMIT

1. The licensee shall not store any container of hazardous waste for more than one year at the facility prior to

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the recycling of its contents on-site or shipment off-site to another appropriately licensed hazardous waste treatment or disposal facility.

The licensee shall maintain an accurate inventory of the wastes stored in containers, including the dates on which each container is received and either recycled on-site or shipped off-site to another appropriately licensed hazardous waste treatment or disposal facility.

D. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the licensee shall transfer the hazardous waste from such container to a container that is in good condition, or otherwise manage the waste in compliance with the conditions of this license.

E. COMPATIBILITY OF WASTE WITH CONTAINERS

The licensee shall assure that the ability of the containers to contain the waste is not impaired as required by R 299.9614 and 40 CFR §264.172, which is adopted by reference in R 299.11003.

F. MANAGEMENT OF CONTAINERS

- 1. The licensee shall keep all containers holding hazardous waste closed during storage except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the containers or cause them to leak, as required by R 299.9614 and 40 CFR §264.173, which is adopted by reference in R 299.11003.
- 2. The licensee is prohibited from storing containers of hazardous waste in locations at the facility other than the hazardous waste container storage areas referenced in Condition III.A.1.
- 3. The licensee shall place containers into the hazardous waste container storage areas only in accordance with the configuration shown in Drawing 7-4 in Attachment 7 of this license or an alternate configuration approved by the Chief of the Waste Management Division.
- 4. The licensee shall not stack containers of hazardous waste in the hazardous waste container storage area (area number 31) and the staging area/hazardous waste storage area (area number 30), greater than two high.

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5. The licensee shall not stack containers of hazardous waste in the temporary storage area (area number 29) greater than one high.

G. CONTAINMENT

The licensee shall operate and maintain the containment system in accordance with the requirements of R 299.9614 and 40 CFR §264.175, which is adopted by reference in R 299.11003, and the attached plans and specifications, Attachment 7 of this license.

H. LABELING OF CONTAINERS

- 1. The licensee shall ensure that each container of hazardous waste is labeled or marked clearly with the words "Hazardous Waste" and the hazardous waste number, as required by R 299.9614, and the date it was accepted for storage so that compliance with the one year storage limit can be assessed. The labels on each container shall be clearly visible for inspection.
- 2. The licensee shall clearly mark each container of land disposal restricted waste to identify its contents and the date it was accepted for storage, as required by R 299.9627 and 40 CFR §268.50(a)(2)(i), which is adopted by reference in R 299.11003.

I. DISPOSITION OF ACCUMULATED LIQUIDS

The licensee shall remove all liquids accumulated in the containment system within 24 hours of detection and manage the liquids in accordance with the requirements of R 299.9614(1)(a) and 40 CFR §264.175(b)(5), which is adopted by reference in R 299.11003, and as specified in Attachments 4 and 9 of this license.

SECTION C WASTE CHARACTERISTICS

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SECTION C

WASTE CHARACTERISTICS

This section provides a description of the chemical and physical nature of the hazardous wastes managed in the container and tank storage areas at the Detrex Corporation facility located in Detroit, Michigan.

The Eaton Avenue facility typically receives halogenated solvent wastes for reclamation (recycling) in both drums and bulk shipments from such industries as metal working industries degreasing operations, rubber molding recovery operations, electronic circuit board defluxing operations, and paint spraying equipment cleaning operations. The facility also sells virgin solvents, consequently, personnel are familiar with the wastes that are received at the facility.

The hazardous waste management operations include container storage and tank storage. Wastes are received in container or bulk shipments. The wastes are processed through the recovery (recycling) system which primarily consists of distillation followed by drying. The recovered solvent product is drummed or stored in product tanks for re-sale and the still bottoms remaining after distillation are transferred to a 5,000 gallon generator accumulation tank. The still bottoms are accumulated for less than 90 days prior to shipment off site to a permitted facility.

The information is provided pursuant to Michigan ACT 451, Part 111 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended and the administrative rules pursuant thereto.

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C-1 OVERVIEW OF WASTE ANALYSIS PLAN

Detrex Corporation has developed a Waste Analysis Plan to ensure the Eaton Avenue facility accepts only wastes for which the facility is permitted to receive. The Waste Analysis Plan has been prepared recognizing the nature of the wastes accepted by Detrex and based on extensive Corporate experience in the handling and recovery (i.e. recycling) of solvent wastes. A copy of the Waste Analysis Plan is maintained at the facility at all times. The Waste Analysis Plan consists of two major types of characterization, Waste Characterization and Waste Screening.

C-1a Waste Characterization

Prior to accepting wastes from a potential new client, Detrex Corporation requires the potential client to complete and certify a "Generator's Waste Material Profile Sheet". A copy of this profile sheet is included as Attachment C-1. This profile sheet requires the waste generator to complete a chemical analysis of the waste. Detrex then collects a representative sample of the potential clients' waste stream and conducts an analytical verification/confirmation program as a secondary check on the accuracy of the Generator's documented profile sheet. Detrex Corporation reviews the profile sheet and confirmation analysis report and conducts a thorough waste generation process review at the potential clients' facility. This process review pays particular attention to the clients solvent use and solvent handling procedures that generate the waste. Based on Detrex's extensive experience in the industry, this process review, in addition to the waste profile sheet information, is sufficient to enable Detrex to make a determination that the potential clients' waste stream is acceptable for storage and processing at the solvent recovery operation.

As an ongoing process, Detrex will verify with the generator on an annual basis that the waste stream in question has not changed. This will be accomplished by utilizing a verification letter which references the original waste profile sheet by an approval number in cases where the waste stream has not changed. Information used in the generation of the call-in sheet will be obtained from the original profile sheet. Waste streams which have changed will require a new profile form to be filled out. A copy of the letter used to verify that a waste stream has not changed is provided in Attachment C-1.

This program will be conducted annually for all clients as a continual check on the wastes being received at the Eaton Avenue facility. At any time that a generator notifies Detrex of a change in the generation process of a waste stream, or at any time that Detrex notices a potential change in waste stream characterization based on regular waste sampling and analysis, a re-characterization program consistent with the program described above will be completed prior to accepting any further wastes from that generator. A record of the results of any annual or other necessary re-characterization review will be maintained on-site in the generator's waste profile files.

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C 1b Waste Screening

Waste Screening involves performing analytical work on each shipment of waste sent to the facility, the mechanics of which will vary according to the size of the container

Waste Screening consists of: visual observation, specific gravity, ignitability, compatibility, and gas chromatography. It is to be noted that ignitability testing is conducted on a discrete sample collected from every container or bulk shipment of waste received at the facility. As noted below, the screening process for containers, with a volumetric capacity less than 500 gallons, involves two steps prior to the material being processed.

The analytical results are recorded on an analytical report. The lab report, in conjunction with sample observation and a review of the specific generator's past analysis and waste profile documentation enable Detrex to determine that a waste is acceptable. A complete record of all sampling and analytical work is placed in the operating files at the facility.

To reduce the amount of time needed to accept hazardous wastes into the facility, signified by the signing of the manifest, Detrex is using a tiered system for testing. Containers having a volumetric capacity less than 500 gallons, such as drums or tote bins; the testing will consist of a fingerprint analysis (testing done to allow acceptance of the material) and secondary screening (testing done to complete the necessary analytical work for processing).

Loads of waste arriving at the facility in bulk tankers will require all waste screening tests (finger-printing analysis and secondary screening) to be performed prior to accepting the waste.

Every container or bulk tanker shipment of waste received at the facility is sampled. Visual observations of the sample identifying any out of the ordinary observations are recorded. For containers of less than 500 gallons, such as drums, a composite sample of up to a maximum of 10 drums (or the number of containers such that the volumetric capacity of the combined containers does not exceed 550 gallons) of a particular waste type per individual generator is then collected to perform the fingerprint analysis and secondary screening. Analytical testing may be done in the on-site laboratory or at another laboratory. The testing procedures described in the following sections are followed by either laboratory. A laboratory Quality Assurance Project Plan (QAPP) has also been developed to ensure the reliability and accuracy of analytical results.

For containers, having a volumetric capacity less than 500 gallons, the wastes are removed from the transport vehicle and placed in the Staging Area in the facility near the Hazardous Waste Container Storage Area. Shipping documents

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(manifest and land band forms) are reviewed. The <u>transporter will remain on-site</u> until a signed copy of the manifest can be provided. Individual and composite (as noted above) samples of waste from each container are obtained in order to perform the required analytical. Testing as noted under C-1b(1) below is performed to determine if the material can be accepted by the facility. Each container at this time will also be marked with an identification number for the purposes of tracking. If the waste passes testing under C-1b(1) the manifest is signed and the carrier of the waste material is allowed to leave the facility. The containers of the waste must remain in the Staging Area pending results under the Secondary Screening.

In the event a waste stream is unacceptable, the manifest is not signed and the original waste generator is contacted to determine appropriate handling of the rejected waste. The waste would be returned by Detrex to the original generator or the manifest and land disposal restriction certificate corrected as appropriate and the waste transported to properly permitted facility on behalf of the generator.

To distinguish between wastes held in the storage area with incomplete analysis and those which have complete analysis, Detrex will develop a Standard Operating Procedure (SOP); the system will utilize a visual system, such as colored tags, to provide immediate verification that a container has obtained complete analysis prior to processing the waste in the system. A copy of the current SOP is available at the facility for review by all personnel. The requirements of the SOP are reviewed with personnel upon hire and periodically thereafter as needed.

C 1b(1) Fingerprint Screening

To reduce the amount of time necessary needed to accept containers, having a capacity of less than 500 gallons, of waste into the facility, Detrex performs a limited initial analysis to verify that the hazardous waste appears to match the description noted on the manifest. Samples obtained from each container, as well as composite samples, are utilized to perform visual observations, specific gravity, and ignitability. The type of sample utilized for each test is specified in the testing procedures.

Based on acceptable results, approval is given to sign the manifest and accept the wastes into the Staging Area (bulk loads will also require testing as found under C 1b(2) & C 1c prior to acceptance). The remainder of the tests will be performed after the manifest is signed, but prior to the processing of the material. As noted earlier, Detrex will develop SOPs to insure that all test are conducted prior to processing.

The analytical results, including those done in order to sign-off on the manifest, are recorded on an analytical report. The lab report, in conjunction with sample observation and a review of the specific generator's past analysis and waste profile documentation, enable Detrex to determine that a waste is acceptable. Composite

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samples used for fingerprint screening may be properly marked and stored at the facility to eliminate redundant sampling in order to comply with the requirements under secondary screening.

C 1b(2) Secondary Screening

After acceptance of containerized waste, of less than 500 gallons, and prior to the processing of this material, the remainder of the analytical work required under the permit (gas chromatography and compatibility [as specified in C 1c]), as well as any additional tests required by Detrex for processing, will be performed. Composite samples, obtained during the fingerprint sampling, may be used to perform the remainder of the testing.

In the event that the testing indicates that the material is non-processable, i.e., has failed one of the required tests, Detrex will contact the generator and begin the arrangements to have the material transported to a licensed permitted facility capable of handling the waste in question. The waste will be properly marked according to Detrex's S.O.P. and will remain in the Staging Area until arrangements can be made with a TSDF licensed to accept the waste. Facility records will note what test(s) the waste failed, what facility the waste was sent to for processing/disposal, and the date the waste left Detrex's facility.

C 1c Waste Compatibility

Another important aspect in the management of hazardous wastes is waste compatibility.

To prevent the mixing of incompatible wastes in the hazardous waste storage tanks at the facility, Detrex will perform compatibility testing on each bulk tanker shipment of waste and composite of container (less than 500 gallons) samples per waste code per generator prior to their being emptied at the facility.

Prior to emptying any waste at the facility, a representative grab sample will be collected from each bulk tanker shipment or composited from containers of the same waste code and generator, using a sampling tube or other similar sampling device. The sample will be placed into a small metal compositing container located within a containment area at the facility, or in the facility's lab. The sampling container will already contain a representative sample of the waste from the storage tank into which the waste will be added.

For containers of less than 500 gallons (i.e., drums), this testing will be performed after acceptance of the material into the facility but prior to processing, as

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noted in C-1b(2) above. As such containers will be stored in the Staging / Storage area until testing is complete. For bulk tank trucks the testing must be performed prior to signing the manifest.

Following placement of the grab sample into the sampling container, the container will be observed for a minimum of two minutes for any signs of incompatibility. This observation will include, but not limited to, the generation of heat, unexpected change in color, generation of vapors, agitation or generation of bubbles, and generation of precipitate. If none of these changes are observed and the results of the other waste screening conducted indicate that the waste is acceptable it may be placed into the Hazardous Waste Storage area or charged to the storage tanks.

For bulk tanker shipments, if one or more of these changes are observed, the manifest will not be signed, and the bulk shipment will be set aside, sampled, and analyzed for the waste screening parameters, or the waste will be rejected. In the event that the waste is rejected, the original waste generator will be contacted to determine appropriate handling of the rejected waste. The waste would be returned by Detrex to the original generator or the manifest and land disposal restriction certificate corrected as appropriate and the waste transported to a properly permitted facility on behalf of the generator. Facility records will note that the waste was not compatible, what facility the waste was sent to for processing / disposal, and the date the waste left Detrex's facility.

If one or more changes are noted for containers, of less than 500 gallons, Detrex will contact the generator and begin the arrangements to have the material transported to a licensed permitted facility capable of handling the waste in question. Facility records will note that the waste was not compatible, what facility the waste was sent to for processing / disposal, and the date the waste left Detrex's facility.

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C-2 CHEMICAL AND PHYSICAL ANALYSES [40 CFR 270.14(b)(2), 264.13(a)]

Provided in Table C-1 is a list of all hazardous wastes which may be received and stored in the container or tank storage areas. In addition to the list of wastes which may be stored at the facility, Table C-1 also provides, for each waste, its EPA hazardous waste identification number, the hazardous constituent/characteristic which designates the waste as hazardous, the EPA process code, and the waste's physical state.

Provided as Attachment C-2 to this application are representative Material Safety Data Sheets for each of the solvent hazardous wastes listed in Table C-1. These sheets describe in detail the chemical and physical properties of each waste managed at the facility to allow their safe handling in accordance with 40 CFR Part 264.

The following Sections document the specific analytical procedures followed by Detrex Corporation to ensure only F001 and F002 wastes with the inclusion of D-series compounds under the TCLP rule, are accepted at the facility.

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TABLE C-1

LIST OF HAZARDOUS WASTES

Hazardous Waste	EPA Hazardous Waste Number ⁽¹⁾	Hazardous Constituent/Characteristic	EPA Process Code	Physical State
1,1,1 Trichloroethane	F001 / F002	Toxic	S01/S02	Liquid / Semi-Liquids
Trichloroethylene	F001 / F002	Toxic	S01/S02	Liquid / Semi-Liquids
Perchloroethylene	F001 / F002	Toxic	S01/S02	Liquid / Semi-Liquids
Methylene chloride	F001 / F002	Toxic	S01/S02	Liquid / Semi-Liquids
Trichlorotrifluoroethane (Freon)	F001 / F002	Toxic	S01/S02	Liquid / Semi-Liquids

Detrex recognizes, based on process knowledge, that these wastes may also be classified as one of the following D-series compounds based on Toxicity Characteristic Leaching Procedure: D004(Arsenic), D005(Barium), D006(Cadmium), D007 (Chromium), D008 (Lead), D009 (Mercury), D010 (Selenium), D011 (Silver), D018 (Benzene), D019 (Carbon Tetrachloride), D021 (Chlorobenzene), D022 (Chloroform), D027 (1,4-Dichlorobenzene), D028 (1,2-Dichloroethane), D029 (1,1-Dichloroethylene), D030 (2,4-Dinitrotoluene), D034 (Hexachloroethane), D035 (Methyl Ethyl Ketone), D036 (Nitrobenzene), D038 (Pyridine), D039 (Tetrachloroethylene), D040 (Trichloroethylene) and D043 (Vinyl Chloride).

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C-3 WASTE ANALYSIS PLAN [40 CFR 270.14(b)(3), 264.13(b),(c)]

C-3a Parameters and Rationale [40 CFR 264.13(b)(1)]

C-3a (1) Initial Waste Characterization

Profile Information

A Generator's Waste Material Profile Sheet (see Attachment C-1) is required from each potential customer for each type of waste. The information on this form includes the process description, shipping mode, physical properties, chemical properties and certification. Further waste characterization/confirmation is completed by Detrex after receipt of a complete and certified profile sheet.

Analytical Information

As part of the information requested on the profile sheet, the waste generator is required to conduct and complete a chemical analysis of the waste. Detrex Corporation is responsible for collecting a representative sample of the prospective waste stream with analysis then being conducted on the raw waste sample for the following parameters:

Comprehensive Testing

Ignitability (D001)
Corrosivity (D002)
Reactivity (D003)
TCLP Analysis
EPA SW-846 Method 1010
EPA SW-846 Method 9040
EPA SW-846 Section 7.3
EPA SW-846 Method 1311

This testing requirement applies only to those generators who have not profiled their material as listed waste (F001, F002) and have not provided characterization of D-series compounds based on process knowledge (i.e. TCLP testing is required for generators who do not classify the TCLP compounds based on analysis or process knowledge). For generators who are profiling listed (process defined) wastes and declaring D-series compounds based in process knowledge, further analysis for the D-series characteristics parameters is not required.

It should be noted that in the event testing is required for copper and zinc, the extraction procedure (EP) toxicity testing method will be utilized until such a time that Michigan receives authority for the TCLP provisions.

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Due to the nature of the solvents and processes involved in waste streams submitted to Detrex for recycling, the remaining D-series constituents are not applicable to cleaning/degreasing systems:

D012	Endrin	D025	P-Cresol
D013	Lindane	D026	Cresol
D014	Methoxychlor	D031	Heptachlor
D015	Toxaphene	D032	Hexachloroebenzene
D016	2, 4-D	D033	Hexachloro-1,3-Butadiene
D017	2,4,5-TP Silvex	D037	Pentachlorophenol
D020	Chlordane	D041	2,4,5-Trichlorophenol
D023	O-Crescol	D042	2,4,6-Trichlorophenol
D024	M-Cresol		•

These compounds are therefore not required to be formally analyzed via TCLP. Rather Detrex will obtain written certification documentation from the generator verifying that these compounds are not present in the waste stream, based upon the generator's knowledge of the materials and generating processes involved. In the event such certification is not provided, analysis will be conducted by Detrex.

Certain D-series parameters also appear in the 40 CFR 261 listings (process-defined) for F003, F004, and F005 wastes, i.e.

Benzene: D019 and F003
Methyl ethyl ketone: D035 and F005
Nitrobenzene: D036 and F004

Therefore, in such cases where a TCLP analysis or generators process knowledge reveals the presence of these compounds, the generator must provide additional verification of the source (usage) of these compounds, so as to determine whether the waste is to be classified as F003, F004, or F005 on the basis of the generating process.

Additional Testing

In addition, a laboratory-scale estimate of potential solvent recovery and purity is performed via rotary vacuum distillation and specific gravity testing. The overhead distillate (recovered solvent) is subsequently analyzed by Gas Chromatography.

Process Review Verification

As the final step in the pre-acceptance qualification procedure, Detrex Corporation conducts an on-Site waste generation process review at the potential client's facility. In examining the generator's solvent usage and handling procedures, Detrex

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confirms proper classification of the waste with reference to listing description/definitions set forth in 40 CFR part 261. Only F001 and F002 listed waste types are acceptable for storage and processing at the Detrex solvent recovery operations.

This process review, in addition to the profile and analytical information as presented above enable Detrex to make a thorough and accurate determination of the characteristic and/or listed classification of each submitted waste stream, along with subsequent final acceptability of each stream in accordance with the facility permit. Documentation of waste characterization is retained on file, on a per-waste stream basis, at the facility.

If an incoming waste is properly characterized as a F001 or F002 waste stream, it should be acceptable to the process stream. The solvent content of the waste, as determined by rotary vacuum distillation and the specific gravity method, provides an estimate of the recoverable solvent yield from the waste stream. Thus, as long as a waste is properly characterized as a F001 or F002 waste, with the inclusion of D-series compounds under the TCLP rule the waste is physically acceptable to the process unit. There are no particular tolerance limits for acceptable versus unacceptable wastes.

C-3a (2) Waste Screening

Waste screening analysis is conducted on all wastes received at the facility to confirm the wastes have acceptable characteristics. For bulk shipments this will be accomplished prior to signing the manifest. For containers having a volumetric capacity of less than 500 gallons, such as drums, the manifest is signed after a limited screening as noted in C-1b(1). The screening analysis is summarized on Table C-2 with parameter and rational for selection.

C-3b Test Methods [40 CFR 264.13(b)(2), 264.13(c)(1)]

Detrex is able to conduct all waste screening analysis at the Eaton Avenue facility, however, Detrex may also utilize outside labs. More detailed waste characterization is completed at an off-site laboratory facility following the Detrex Waste Analysis Plan. An off-site facility may also conduct screening analysis as conditions require (equipment maintenance). The testing procedures described in the following sections are followed by either laboratory. All containers are stored in a maintained segregated area within the hazardous waste container storage area until analysis is complete and the manifest is signed.

Detrex will conduct an ignitability test (ASTM Method D4982-89) on a discrete sample collected from each containers or bulk shipment of waste received at the

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facility. In the event a positive result is observed, the specific container(s) or bulk waste shipment would be further tested utilizing ASTM D93 (Test Method for Flash Point by Pensky-Martens Closed Test) to confirm a flash point below 140°F In the event that a flash point of less than or equal to 140°F is observed, the waste will be rejected either back to the original generator, or a permitted disposal site on behalf of the generator, after the manifest and land ban forms are revised to include D001

Provided as Attachment C-3 are copies of the Standard Operating Procedures for all testing methods conducted by Detrex. Included is the specific gravity test; a copy of ASTM Method D4982-89 (ignitability test); the solvent extraction method; and method for determination of solvents in spent solvents by gas chromatography. The solvent extraction and gas chromatography methods were developed by Detrex Corporation. They are modifications to US EPA approved methodologies (i.e. Methods 8010 and 8015, SW-846). Standard methodologies are not appropriate due to the percentage levels of organics present in the waste streams. Standard methodologies were developed for the purpose of evaluating concentrations at very low detection levels for drinking water purposes.

Detrex also conducts a visual inspection of the hazardous waste during screening of the waste. Observations are made during sampling pertaining to abnormal solid content, color, or if it is an aqueous solution rather than an oil/solvent mixture.

Attachment C-4 presents a copy of the analytical report generated during waste screening. All appropriate laboratory results are documented on the laboratory report. In order to ensure the reliability and accuracy of the analytical results, Detrex Corporation has developed a Quality Assurance Project Plan (QAPP). A copy of this document is provided as Attachment C-5.

This document describes all laboratory procedures and related quality control/quality assurance procedures followed by Detrex Corporation laboratory personnel to ensure the reliability of analytical results.

C-3c Sampling Method [40 CFR 264.13(b)(3), 264.13(c)(2)]

The collection of concentrated waste samples is conducted by facility personnel. The samples are collected by glass thief. Sampling procedures are described in Attachment C-6.

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C-3d Frequency of Analysis [264.13(b)(4]

Waste screening as described in the waste analysis plan is conducted on each shipment of wastes received from a customer.

The waste is sampled as per the sampling method presented in Section C-3c. A preliminary assessment of the waste sample will be made by running a rotary vacuum distillation and specific gravity test to determine the approximate solvent content and an ignitability test to ensure it is not potentially flammable. The sample is then submitted for organic analysis. Analytical procedures were described in Section C-3b and are further described in the QAPP.

Regardless of whether or not Detrex accepts the waste for processing, all of the foregoing knowledge, including laboratory results, is kept in the customer's file for future reference and comparison with future shipments, if they become a regular customer.

C-3e Additional Requirements for Wastes Generated Off Site [40 CFR 264.13(b)(5)]

Each waste stream will be re-characterized annually, at a minimum, or when Detrex is notified or has reason to believe that the process or operation generating the hazardous waste has changed; or when the results of waste shipment inspections indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest. Detrex has implemented procedures requiring generators to notify Detrex when operation procedures change.

Date: 02/01/96 Revision: 96-1 Page: C-16

TABLE C-2

PARAMETERS AND RATIONALE FOR THEIR SELECTION

Classification	Parameter	Rationale
F001 Hazardous Waste	1,1,1 Trichloroethane Trichloroethylene Perchloroethylene Trichlorotrifluoroethane Methylene Chloride	Listed toxic waste (F001)
F002 Hazardous Waste	1,1,1 Trichloroethane Trichloroethylene Perchloroethylene Trichlorotrifluoroethane Methylene Chloride	Listed toxic waste (F002)
Stabilizer Compounds	2-Propanol Nitromethane Butylene Oxide sec - Butyl Alcohol Dioxolane Cyclohexeneoxide n-propanol Toluene 1,4-Dioxane	Processing Knowledge (to determine amount/type of additional stabilizer required after recycling)
Other Compounds	Methanol Ethanol Acetone Acetone Methyl Ethyl Ketone Methyl isobutyl Ketone t-Butyl Alcohol n-Butyl Alcohol Toluene Xylenes	Processing Knowledge [Expected only in very small quantities (i.e. much less than 10 percent)]
	Ignitability	To ensure no flammable wastes are accepted
	Solvent Content (%)	Processing Knowledge
	Non-Volatile Residue (%)	Processing Knowledge

Date	
Generator Name Address City State zip Generator EPA ID #	
RE: Re-evaluation of waste stream number	
Dear Sir/Madame:	
As required under our permit, Detrex Corporation is required to perform for processing. As such we are requesting that you review the informat document to us. Failure to do so will prevent us from being able to proto the waste stream, you must complete a new Generator Waste Material form if one is needed. WASTE STREAM INFORMATION.	ion as shown below and return this signed beess your waste. If there have been any changes Profile Sheet. Please contact the facility for a
WASTE STREAM APPROVAL NUMBER:	
PROCESS GENERATING THE WASTE:	
CONSTITUENTS:	PERCENTAGE
EPA/STATE WASTE CODES:	
I certify that the information contained above is an accurate representation Corporation and that the process generating the hazardous waste has not original 'Generator Waste Material Profile Report'.	on of the waste stream on file with Detrex changed since completion and submission of the
GENERATOR'S SIGNATURE	TITLE

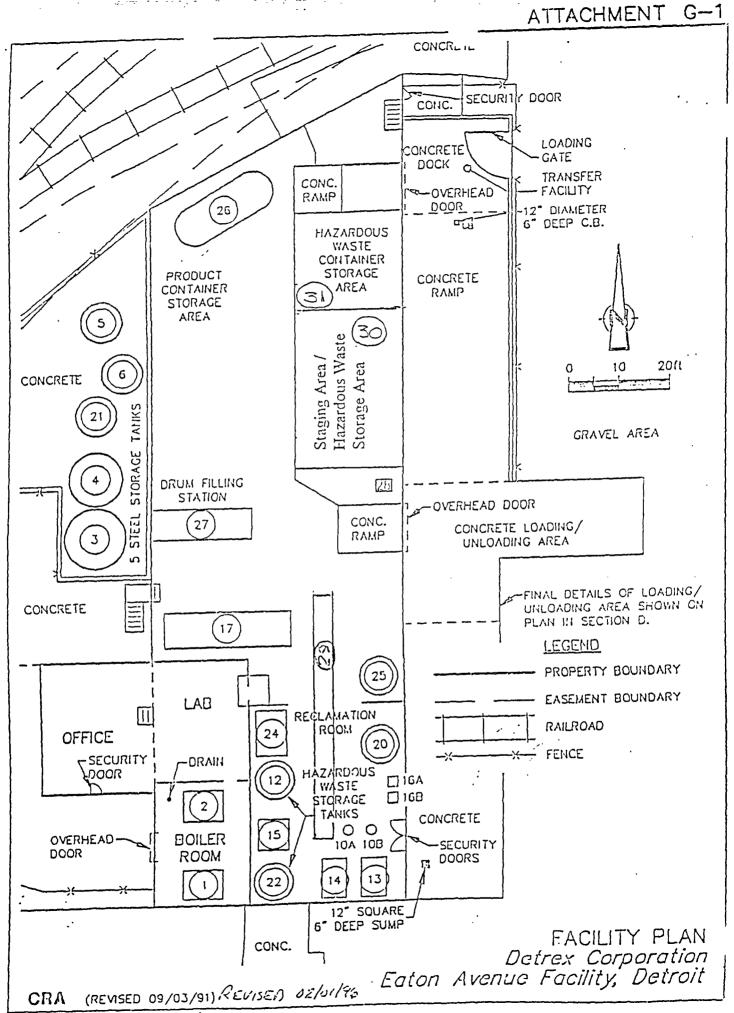
PRINTED NAME

DATE

DETREX CORPORATION

DAILY HAZARDOUS WASTE INSPECTION RECORD

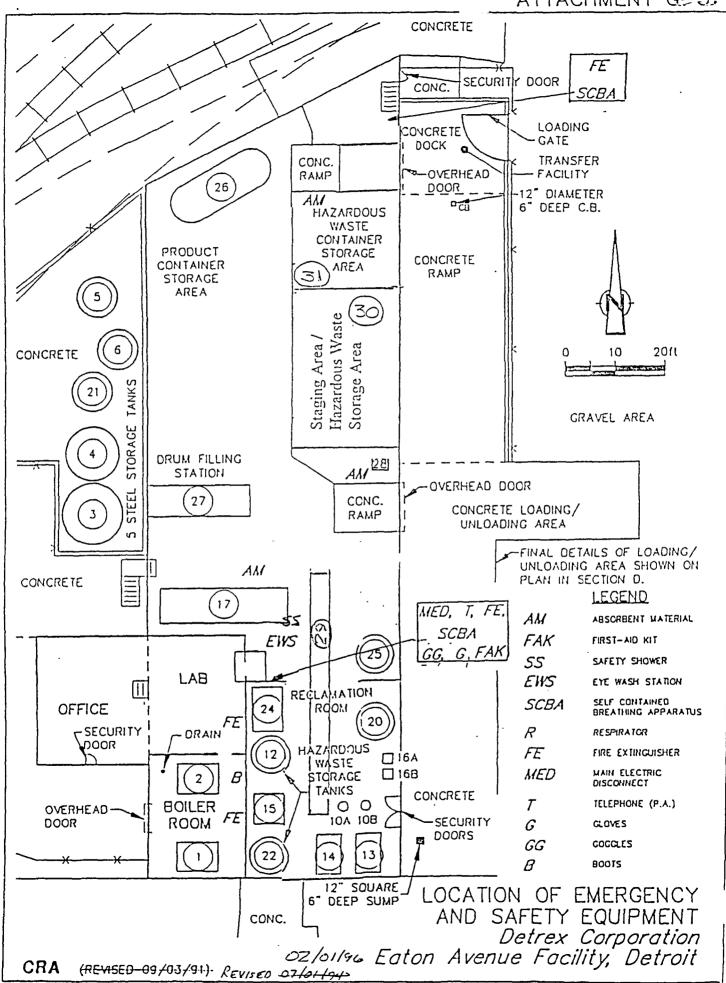
SOLVENTS & ENVIR	ONMENTAL DIVISI	ON			Branch: DE	TROIT, MI.
NSPECT FOR LEAK	S, SEEPAGE		DESCRIB	E GENERAL CONDITION	V .	
OR PROB	LEMS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Container storage areas:	Leaking Drums					
No.'s 29 - 30 - 31	Drum bungs secure					
	Corresion					
	Proper stacking height					
	Proper labeling					
	Adequate aisle space					
Tank storage area	Leaking tanks					
& associated piping:	Leaking piping					
., -	Corrosion					
•	Liquid level in tanks					
Transfer lines/Transfer pu						
	Leaking, cracking					l
nterior Secondary	Presence of fiquid					
Containment:	Cracks, joints		<u> </u>			
.oading/Unloading Area:	Presence of liquid					
	Cracks, joints					
Absorbant Material;	Adequate supply					
Doors:	Open freely Locks function					
Generator Waste	Overflow control and					
Tank # 17	Monitoring equipment		1			,
	Storage tank and					
	drum area			(
SVRM - (Solvent Vapor R						
Report Completed B						
Time and Date of Ins	paction:					
Time and Date of the	poolion.					
Notes: Comments C	onceming		,			
Potential Problems						
file-dai						

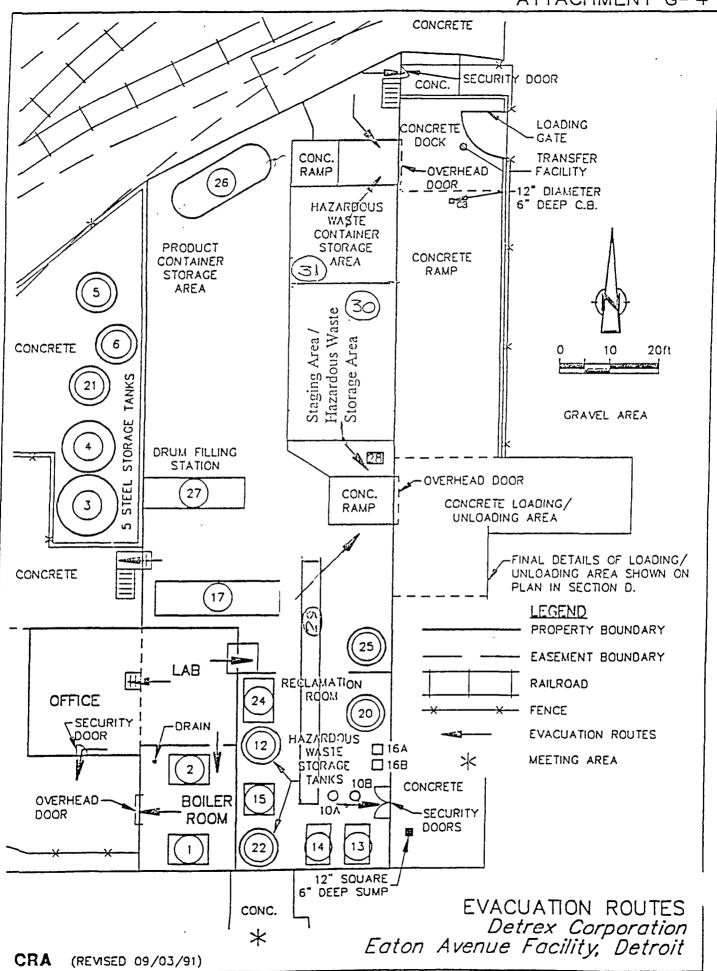


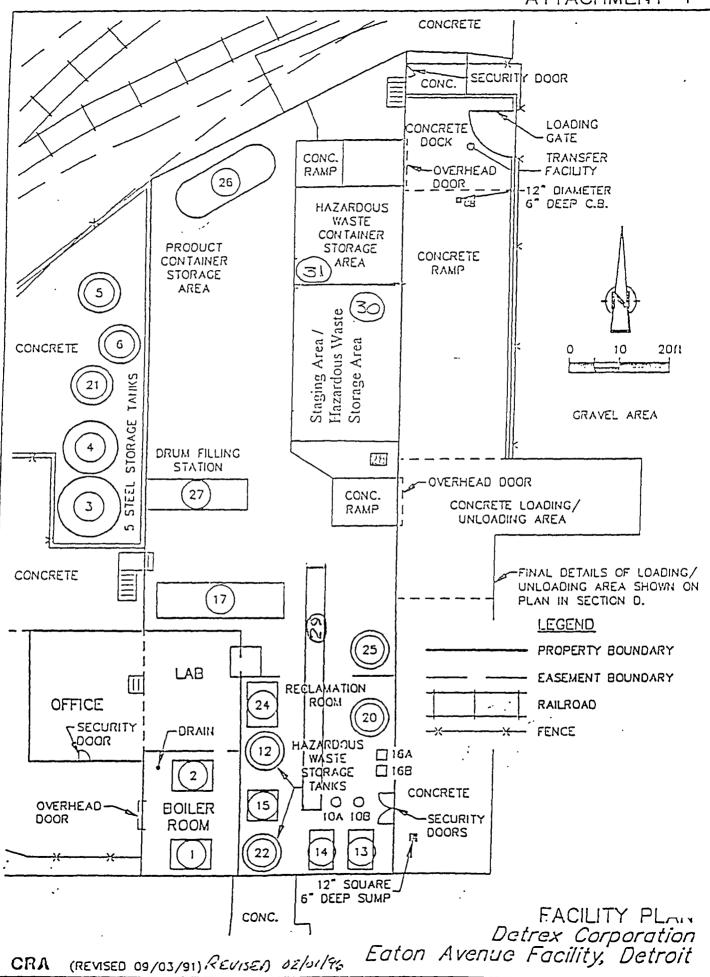
Date: Revision: 02/01/96 96-1

LIST OF PROCESS EQUIPMENT

I.D. No.	Equipment Name	Description
17	5,000 gal. Still Bottom Tank	5,000 gallon carbon steel storage tank. Used for temporary storage of still bottoms from recovery of chlorinated solvents (F002 material)
20	2,500 gal. Holding Tank	2,500 gal 316 stainless steel storage tank used for storage of reclaimed solvent
21	4,500 gal; 1,1,1-Trichloroethane	4,500 gal. Carbon steel storage tank used for storage of 1,1,1 Trichloroethane
22	4,500 gal. Hazardous Waste Storage Tank	4,500 gal. Carbon steel storage tank used for temporary storage of F001 or F002 material prior to being processed by Detrex stills.
24	DCI Still	DCI Model Dyna-1-500 Solvent Recovery Still. Used to recover chlorinated solvents from still bottoms from recovery of same (F002 material) via live steam injection. The unit can process approximately 500 gallons per hour.
25	3,000 gal. Holding Tank	3,000 gal. 316 stainless steel storage tank used for storage of reclaimed solvent.
26	SVRM - Carbon Absorption Unit	
27	Drum Filling Station	Product Drumming Station. Used for filling 55- gallon drums with product. Unit can fill approximately 30 drums per hour and is operated as necessary.
28	Product Blending Vessel	550 gal. Carbon steel vessel utilized for product blending.
29	Temporary Storage Area	Roller conveyor used as temporary storage of up to 18 x 55 gallon drums. Drums on conveyor are destined for processing.
30	Staging Area / Hazardous Waste Storage Area	Area used to store containerized waste (less than 500 gallon DOT approved containers) that have not yet received full waste screening.
31	Hazardous Waste Storage Area	Storage area for wastes which have full waste screening performed. Total capacity between areas 29, 30, & 31 shall not exceed 150 x 55 gallon drums or the equivalent gallons.





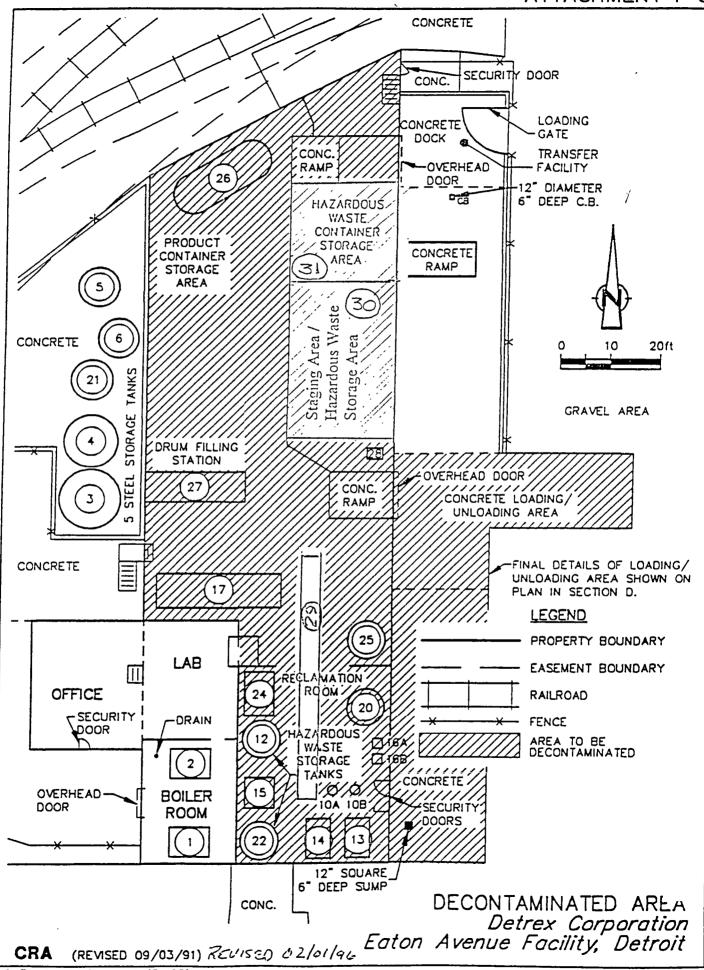


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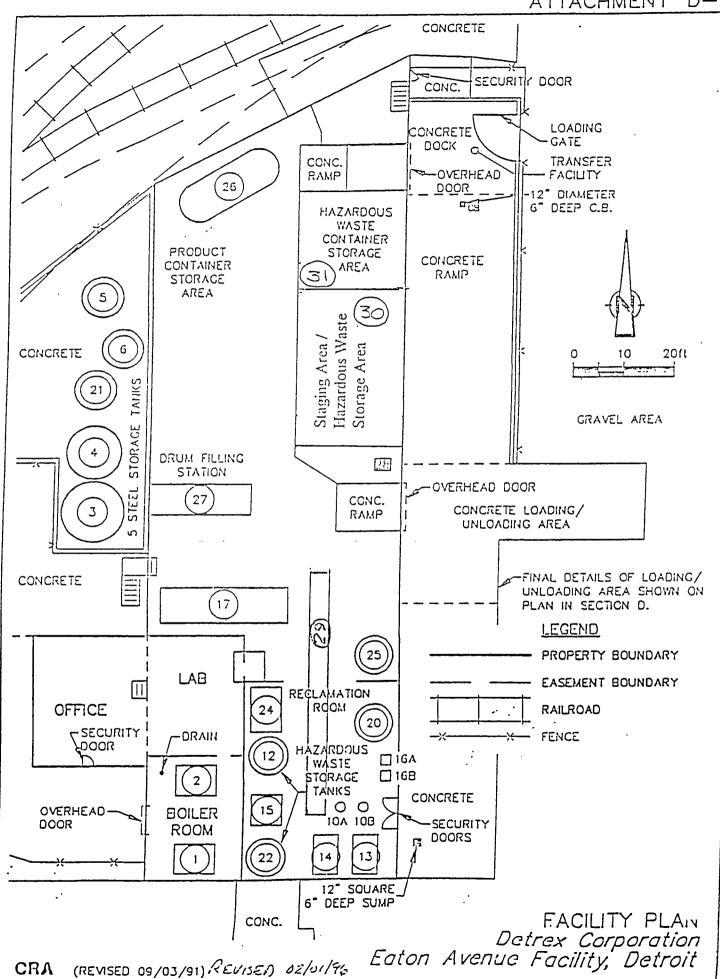
Date: Revision: 02/01/96 96-1

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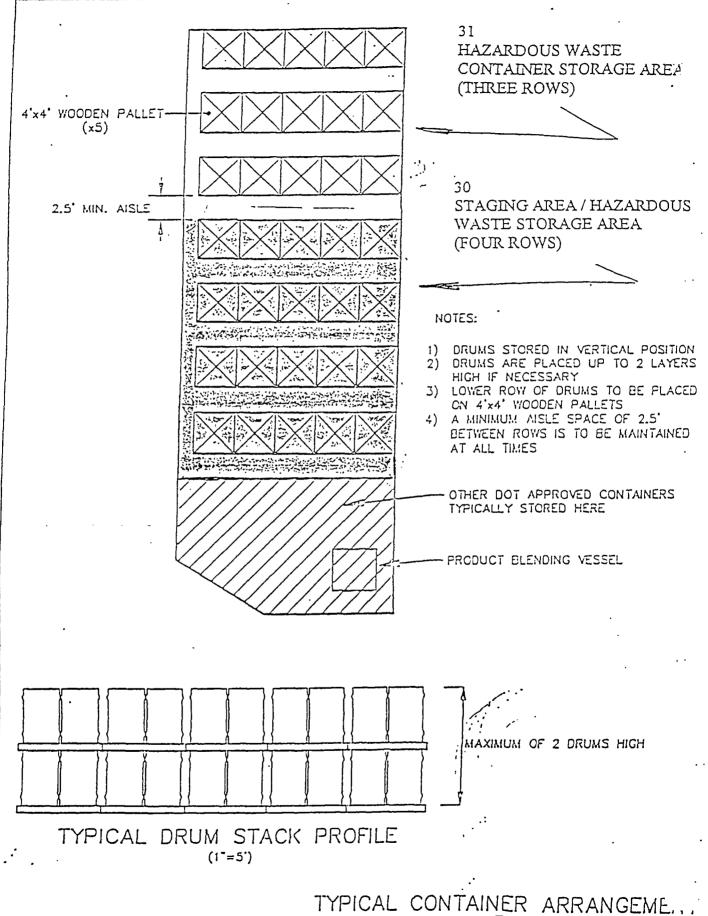
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2471-04/06/91-1-0 (8-14)

Date: Revision: 02/01/96 96-1

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7-30-96 (REVISED 02/03/91)

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PICAL CONTAINER ARRANGEME... Detrex Corporation Eaton Avenue Facility, Detroit

DETREK CORPORATION MAILING LIST MID 091 605 972

AMBERGER JOHN M SEMCOG 660 PLAZA DR STE 1900 DETROIT MI 48226

HAMMERS KATHERINE HAMMERS KATHERINE HONIGMAN MILLER ET AL 2290 FIRST NATIONAL BLDG DETROIT MI 48225-3583

HOLMES DAVID S JR REP HOUSE OF REPRESENTATIVES STATE CAPITOL PO BOX 30014 LANSING MI 48909-7514

POLITO JOSEPH M GAINES GEORGE
HONIGMAN MILLER ET AL DETROIT DEPT OF HEALTH
2290 FIRST NATIONAL BLDG 1151 TAYLOR ST
DETROIT MI 43225-3533 DETROIT MI 43202

VAUGHN JACKIE III SENATOR SENATE STATE CAPITOL PO EOX 30036 LANSING MI 48909-7536

WILHELMI WAYNE E BOHN ENGINE & FOUNDRY DIV STATE POLICE
1310 KALAMAZOO ST FIR MARSHAL D SOUTH HAVEN MI 49090

CONS & ENV COMMITTEE HOUSE OF REPRESENTATIVES RM 420 STATE CAPITOL PO BOX 30014 LANSING MI 48909-7514

NATURAL RESOURCES & ENV AFFAIRS COMMITTEE SENATE/RM 360 BSF PO BOX 30036 LANSING MI 48909-7536

ROBERTSON GARY 8436 STOUT WARREN MI 48093

SINHA RAJ WAYNE CO HEALTH DEPT AIR POLLUTION CONTROL DIV 640 TEMPLE ST STE 700 DETROIT MI 48201

WATT FLINT, ACTING CHIEF MI DEPT OF PUBLIC HEALTH BUR OF EN/ & OCC HEALTH PO BOX 30195 LANSING MI 48909

LOBEESTAEL DAVE DYNECOL INC 6520 GEORGIA ST DETROIT MI 46211

SCHAEFER WADE CAPT FIR MARSHAL DIV HAZARDOUS MATERIALS SEC 7150 HARRIS DR LANSING MI 48913

GOTTHELF BETH

SEYBURN KAHN ET AL

2000 TOWN CTR STE 1500

SOUTHFIELD MI 48075-1195

JEFF DAUPHIN

MICHIGAN WASTE REPORT

3250 TOWNSEND AVE NE

GRAND RAPIDS MI 49505-2558

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

DEG_ U.5_ 1995_i

DATE:

SUBJECT: Review of Detrex Corporation's

Leak Detection and Air Monitoring Program Report

FROM: Shari Sutker Scuttur

IL/IN/MI Permits Section

TO: Connie Berg

OH/MN/WI Permits Section

Per our conversation this morning, I am forwarding you the Detrex Corporation's Leak Detection and Air Monitoring Program report for your review. Detrex submitted this report in response to our June 7, 1995, Subpart AA and BB Information Request. Since Detrex is a low-priority facility, I do not expect to work on this facility until next fiscal year. However, I would appropriate your comments on this report at your earliest convenience. Thank you for your cooperation regarding this matter.

cc: Harriet Croke

1600

DETREX CORPORATION



P.O. Box 5111, Southfield, MI 48086-5111

EXECUTIVE OFFICE TELEPHONE (810) 358-5800 FAX: (810) 358-5803

August 15, 1995

U.S.E.P.A.- Region 5 77 West Jackson Boulevard Chicago, IL 60604-3590 Attn. Ms. Shari Sutker, Geologist

Re: Information Request Subpart AA and BB, Detrex Corporation, Detroit, MI.

Dear Ms. Sutker,

Enclosed you will find a copy of the AA-BB Compliance Manual for the Detrex facility located at 12886 Eaton Avenue, Detoit, MI 48227. (MID 091 605 972).

As I mentioned to you in our last conversation, Mr. Issa H. Shamiyeh has requested that I furnish the response to your request since I was involved in the installation and original testing of the Control Device at the facility. However, there have been a number of circumstances which have made gathering the information a difficult task.

With the exception of the 1995 Subpart BB Monitoring, I believe the information furnished is the most current available and will meet your requirments. Upon completion of the BB Monitoring next week, I will forward a copy of the report for inclusion in Section II of the manual once the engineer has completed the monitoring.

In the event you have any questions, concerns or comments, please feel free to contact me at your earliest convenience.

Rónald E. Swan, Jr. - CHMM, PE Manager of Corporate Engineering

cc:

Ronda Blayer - MDNR Jeanette Nichole - MDNR

D. Crandell, R. Currie, R. Hritzkowin, B. King T. Porter, I. H. Shamiyeh-Detrex



JIL 1 2 1935: HRP-8J

CERTIFIED MAIL #P 851 379 099 RETURN RECEIPT REQUESTED

Issa H. Shamiyeh Director of Risk Management Detrex Corporation P.O. Box 5111 Southfield, MI 48086-5111

Re: Subpart AA and BB Extension Request

Detrex Corporation MID 091 605 972

Dear Mr. Shamiyeh:

The United States Environmental Protection Agency (U.S. EPA) has received your letter, dated July 6, 1995, requesting an extension for submittal of Subpart AA and BB information. The U.S. EPA hereby approves your request. The Subpart AA and BB information for the Detroit, Michigan facility must be submitted by August 6, 1995.

If you have any questions regarding this letter, please contact me at (312) 886-6151.

Sincerely,

Shari Sutker, Geologist Michigan Section RCRA Permitting Branch

cc: Ronda Blayer (MDNR)

Jeanette Noechel (MDNR-Livonia)

WMD\OR\RPB\MI\SLK\n1-s1k\O7-11-95\F:\U\S\L\AAANDBB.APP

	CONCURRE	<u>NCE REQU</u>	<u>JESTED FF</u>	OM RPB			
	SC/BR		NL 6/1				
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_		710	1000				
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			H, D				

DETREX CORPORATION



P.O. Box 5111, Southfield, MI 48086-5111

EXECUTIVE OFFICE

TELEPHONE: (810) 358-5800

FAX (810) 358-5803

ECC Express Mail

July 6, 1995

Ms. Shari Sutker, Geologist
Michigan Section, RCRA Permitting Branch
U.S.E.P.A. - Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: Request for Information; Subpart AA and BB, Detrex Corporation, Detroit, MI MID 091 605 972

Dear Ms. Sutker,

I am writing with regard to your correspondence dated June 7, 1995 received on June 12, 1995 pertaining to the above subject.

I would like to take this opportunity to respectfully request a 30 day extension to the original deadline for submission of the information. The reason the extension is necessary is that just recently we have lost our Manager of RCRA Compliance. Hence, pulling all of the required information together will take considerably longer than under normal circumstances.

I hope you are in agreement that the extension is warranted and will allow Detrex to submit the required materials by August 12, 1995.

If you have any questions, concerns or comments, please feel free to contact me at your earliest convenience

Sincerely,

Issa H. Shamiyeh

Director of Risk Management

cc: Ronda Blayer - MDNR

Jeanette Nichole - MDNR

detaabb.doc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

WE 0 7 1955

REPLY TO THE ATTENTION OF

HRP-8J

CERTIFIED MAIL P 851 379 095 RETURN RECEIPT REQUESTED

Mr. Issa Shamiyeh Director of Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

> Re: Information Request Subpart AA and BB Detrex Corporation, Detroit, Michigan MID 091 605 972

Dear Mr. Shamiyeh:

The United States Environmental Protection Agency (U.S. EPA) is requesting updated information regarding compliance with the Organic Air Emission Standards for Process Vents (40 CFR 264 Subpart AA) and for Equipment Leaks (40 CFR 264 Subpart BB). Specifically, the U.S. EPA is requesting the information outlined in Attachment I to this letter for all process vents and equipment at the Detroit, Michigan facility that is subject to Supbarts AA and BB.

Please submit the information outlined in Attachment I within 30 days of receipt of this letter. If you have any questions regarding the attachment, please contact me at (312) 886-6151.

Sincerely.

Shari Sutker, Geologist

Thani Suther

Michigan Section

RCRA Permitting Branch

Enclosure

cc: Ronda Blayer (MDNR)

Jeanette Noechel (MDNR-Livonia)

ATTACHMENT I

Information Request for Subpart AA and BB
Detrex Corporation
Solvents and Environmental Services Division
Detroit, Michigan, MID 091 605 972

Subpart AA: Air Emission Standards for Process Vents

7

- 1. Process vent information required by 40 CFR 264.1035(b)(2) and 40 CFR 264.1035(f).
- 2. Control device information required by 40 CFR 264.1035(b)(3), 40 CFR 264.1035(b)(4) and 40 CFR 264.1035(c).
- 3. Certification statements as required by 40 CFR 264.1035(b)(4)(iv) and 40 CFR 264.1035(b)(4)(v).

Subpart BB: Air Emission Standards for Equipment Leaks

- 4. Equipment information required by 40 CFR 264.1064(b)(1), 40 CFR 264.1064(d), 40 CFR 264.1064(g), 40 CFR 264.1064(j), 40 CFR 264.1064(k) and 40 CFR 264.1064(m).
- 5. Control device information required by 40 CFR 264.1064(b)(3), 40 CFR 264.1064(b)(4), and 40 CFR 264.1064(e) which includes the information required by 40 CFR 270.25(e)(1)-(3).
- 6. Valve information required by 40 CFR 264.1064(h) and 40 CFR 264.1064(i).
- 7. Certification statements as required by 40 CFR 270.25(e)(4) and 40 CFR 270.25(e)(5).

NATURAL RESOURCES COMMISSION

> JERRY C. BARTNIK LARRY DEVUYST PAUL EISELE JAMES HILL DAVID HOLLI JOEY M. SPANO JORDAN B. TATTER



JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

February 2, 1995



OFFICE OF RCRA WASTE MANAGEMENT DIVISION EPA, REGION V

Mr. William M. Moore, Jr., Corporate Manager Environmental Compliance RCRA Sections Petrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Moore:

Subject: Act 64 Operating License, Minor Modification Detrex Corporation, Detroit, MID 091 605 972

On January 11, 1995, the Michigan Department of Natural Resources (Department) received a letter from Mr. Ronald C. Hritzkowin, Detrex Corporation (Detrex), notifying the Department of changes regarding emergency coordinator personnel for the referenced facility. These changes constitute a minor modification to the June 29, 1992 operating license that was issued to Detrex pursuant to the Hazardous Waste Management Act, 1979 PA 64, as amended (Act 64). As outlined in R 299.9519(5)(b)(ix) of the Act 64 administrative rules, prior Department approval of this minor modification is not required. The purpose of this letter is to acknowledge receipt of the minor modification notice from Detrex.

In accordance with R 299.9519(6)(b) of the Act 64 administrative rules, Detrex is required to send a notice of the minor modification to all persons on the facility mailing list and to the appropriate units of state and local government. Such notice must be provided within 90 calendar days of the date that the changes were put into effect. A copy of the facility mailing list is enclosed for your use.

If you have any questions, please contact Ms. Ronda L. Blayer of my staff at telephone number 517-373-9548, or me.

Jim Sygo, Chief Waste Management Division

517-373-9523

Simćerély.

Enclosure

cc: Mr. Ronald C. Hritzkowin, Detrex w/enc.

Ms. Shari Sutker, U.S. EPA w/enc.

MS. Lorraine Kosik, U.S. EPA

Dr. Ben Okwumabua/Ms. Jeanette Noechel, DNR-Livonia w/enc.

Mr. Steve Buda, DNR

Ms. Ronda L. Blayer, DNR w/enc.

Operating License File w/enc.



DETREX CORPORATION MAILING LIST MID 091 605 972

AMBERGER JOHN M SEMCOG 660 PLAZA DR STE 1900 DETROIT MI 48226

HAMMERS KATHERINE HONIGMAN MILLER ET AL 2290 FIRST NATIONAL BLDG DETROIT MI 48226-3583

HOLMES DAVID S JR REP

HOUSE OF REPRESENTATIVES

WAYNE CO HEALTH DEPT

AIR POLLUTION CONTROL PO BOX 30014 LANSING MI 48909-7514

MCINTOSH CHAD EXECUTIVE OFFICE DNR 3RD FL OLDS PLAZA LANSING MI 48909

POLITO JOSEPH M
HONIGMAN MILLER ET AL

2290 FIRST NATIONAL BLDG

DETROIT MI 482 DETROIT MI 48226-3583

VAUGHN JACKIE III SENATOR SENATE STATE CAPITOL PO BOX 30036 LANSING MI 48909-7536

WILHELMI WAYNE E BOHN ENGINE & FOUNDRY DIV STATE POLICE
1310 KALAMAZOO ST FIR MARSHAL D SOUTH HAVEN MI 49090

CONS & ENV COMMITTEE HOUSE OF REPRESENTATIVES RM 420 STATE CAPITOL PO BOX 30014 LANSING MI 48909-7514

GOTTHELF BETH

NATURAL RESOURCES & ENV AFFAIRS COMMITTEE SENATE/RM 860 BSF PO BOX 30036 LANSING MI 48909-7536

ROBERTSON GARY 8436 STOUT WARREN MI 48093

AIR POLLUTION CONTROL DIV 640 TEMPLE ST STE 700 DETROIT MI 48201

WATT FLINT, ACTING CHIEF MI DEPT OF PUBLIC HEALTH BUR OF ENV & OCC HEALTH PO BOX 30195 LANSING MI 48909

DETROIT DEPT OF HEALTH DETROIT MI 48202

LOBBESTAEL DAVE DYNECOL INC 6520 GEORGIA ST DETROIT MI 48211

SCHAEFER WADE CAPT FIR MARSHAL DIV HAZARDOUS MATERIALS SEC 7150 HARRIS DR LANSING MI 48913

JEFF DAUPHIN GOTTHELF BETH

SEYBURN KAHN ET AL

MICHIGAN WASTE REPORT

2000 TOWN CTR STE 1500

SOUTHFIELD MI 48075-1195

GRAND RAPIDS MI 49505-2558





SOLVENTS & ENVIRONMENTAL SERVICES DIVISION

December 30, 1994

Michigan Department of Natural Resources Waste Management Division Hazardous Waste Permits Section John A. Hannah Bldg. P.O. Box 30241 Lansing Michigan 48900 Attn: Ronda L. Blayer Senior Environmental Engineer

Dear Mrs. Blayer:

Please find attached a revised "EMERGENCY COORDINATORS" form, for the Detrex Solvents & Environmental Service Division, located at 12886 Eaton Avenue, Detroit, MI. 48227.

If you have any questions please feel free to contact me.

Sincerely

DETREX SOLVENTS & ENVIRONMENTAL SERVICES

Ronald C. Hritzkówin

Operations Manager

file-emercor1

JAN 2 0 1905

OFFICE OF RCRA EPA, REGION V

RECEIVED

JAN 1 1 1995

Waste Management Division

Date: 12-8-94 Revision: 94-1 Page: G-8

TABLE G-2 **EMERGENCY COORDINATORS**

-caideroni	Control	Delete 12/8/9	4	Westland, Michigan
Joseph	Quality	(913) 491-4530	(313) 728-2117	643 Forest
Levi Dougiass	Warehouse Manager	(313) 491-4550	(313) 863-0586	18615 Muirlend Detroit, Michigan 48221
Alternate	•			
Ronald Hritzkowin	▲	(313) 491 -4 550	(810) (819) 354-0930	23589 Lahser Southfield, Michigan 48035
Primary				
Name	Job Title	Work Phone	Home Phone	Home Address

NATURAL RESOURCES COMMISSION

> JERRY C. BARTNIK LARRY DEVUYST PAUL EISELE JAMES HILL DAVID HOLLI JOEY M. SPANO JORDAN B. TATTER



JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

John Hannah Building, P.O. Box 30241, Lansing, MI 48909

ROLAND HARMES, Director

December 27, 1993

Mr. William M. Moore, Jr., Corporate Manager Environmental Compliance Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Moore:

SUBJECT:

Act 64 Operating License, Minor Modification

Detrex Corporation, Detroit, Michigan, MID 091 605 972

This letter is in response to the December 9, 1993 letter from Mr. Ronald Hritzkowin of your company requesting that the Michigan Department of Natural Resources (Department) modify the June 29, 1992 operating license that was issued to Detrex Corporation pursuant to the Hazardous Waste Management Act, 1979 P.A. 64, as amended (Act 64).

The requested modification is to replace the existing generator waste material profile form and laboratory analysis form that are contained in Attachments C-1 and C-4 of the Waste Analysis Plan, respectively, with the proposed forms included with the request. The Department has reviewed the proposed forms. Based on this review and a revised laboratory analysis form that Mr. Hritzkowin provided to the Department on December 14, 1993, the requested minor modifications are hereby approved. Enclosed are the replacement pages for inclusion in the Waste Analysis Plan which is contained in Attachment 1 of the Act 64 operating license. These minor modifications are effective immediately.

If you have any questions, please contact Ms. Ronda L. Blayer at Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, Michigan 48909, or at telephone number 517-373-9548.

______//

Jim Śygo, Ch⁄ief√

Waste Management Division

517-373-9523

Enclosures

cc: Mr. Ronald Hritzkowin, Detrex w/encs.

✓Mr. Richard Traub/Ms. Shari Kolak, U.S. EPA w/encs.

Ms. Lorraine Kosik, U.S. EPA

Dr. Ben Okwumabua/Ms. Jeanette Noechel, DNR-Livonia w/encs.

Mr. Steve Buda, DNR w/encs.

Ms. Ronda L. Blayer, DNR w/encs.

Ms. Elaine Bennett, DNR w/encs.

Operating License File w/encs.

Select Individuals on Facility Mailing List w/encs.

GENERATOR'S WASTE MATERI PROFILE SHEET

DETREX CORPORATIO_ Solvents Division 12866 EATON AVE. DETROIT. MI 48227 (313) 491-4550 FAX:(313) 491-8044

Code:	 	
Date:	 	
Sales:	 	

IMPORTANT: BEFORE WE CAN ACCEPT HAZARDOUS WASTE FOR PROCESSING OR DISPOSAL. WE MUST ANALYZE A CROSS SECTIONAL SAMPLE UNIQUE TO EACH WASTE STREAM AND TRULY REPRESENTING ALL PHYSICAL AND CHEMICAL PROPERTIES. IT IS EXTREMELY IMPORTANT, THEREFORE, THAT PROPER SAMPLING TECHNIQUE BE USED AND THAT THE SAMPLE BE DRAWN BY A GENERATOR'S EMPLOYEE FAMILIAR WITH BOTH THE WASTE STREAM AND SAMPLING TECHNIQUE. IN CASES WHERE THE SAMPLING IS DONE BY PERSONNEL OTHER THAN GENERATOR EMPLOYEES, A QUALIFIED GENERATOR EMPLOYEE SHALL WITNESS AND DIRECT THE SAMPLING PROCEDURE, AND SIGN THIS FORM IN THE APPROPRIATE PLACE. CHEMICAL ANALYSIS COMPLETED BY A REPUTABLE INDEPENDENT LABORATORY WILL BE ACCEPTED PROVIDING THE ANALYSIS IS IN SUFFICIENT DETAIL AND THE GENERATOR ASSURES US THAT PROPER SAMPLING TECHNIQUE WAS USED. PLEASE TYPE OR COMPLETE THIS FORM IN INK FOR EACH SAMPLE AND RETURN IT TO US AT THE ADDRESS CHECKED OFF ON THE REVERSE SIDE OF THIS FORM. PHOTO COPY FOR YOUR RECORDS.

PROCEDURE, AND SIGN THIS FORM IN THE APPROPRIATE PLACE. CHEMICAL ANAL' PROVIDING THE ANALYSIS IS IN SUFFICIENT DETAIL AND THE GENERATOR ASSURE: THIS FORM IN INK FOR EACH SAMPLE AND RETURN IT TO US AT THE ADDRESS CHEMICAL	B US THAT PROPER SAMPLING TECHNIQUE WAS USED. PLEASE TYPE OR COMPLET
A. GENERAL INFORMATION Generator Name Facility Address:	
	Technical Contact:
	Title:
Phone:	FAX:
B. MAIL INVOICES TO Company Name:	
Phone:	FAX:
C. WASTE STREAM DESCRIPTION	
Generators Common Name or Description of Waste Product	
Process Description	
TE: Information	□ Over 500 PPM □ Solid □ Liquid □ Not Present
Pesticide Information Under 50 PPM Between 50 - 500 PPM	Over 500 PPM Solid Liquid Not Present
PCP Information Under 50 PPM Between 50 - 500 PPM Dioxin Information Under 50 PPM Between 50 - 500 PPM	Over 500 PPM Solid Suiguid Not Present
Dioxin Information Under 50 PPM Between 50 - 500 PPM	Over 500 PPM Solid Liquid Not Present
	is Per: ☐ One Time, ☐ Week, ☐ Month, ☐ Quarter, ☐ Yea erator Preference: ☐ Recycle and Return ☐ Disposa
E. SHIPPING AND HANDLING REQUIREMENTS Mode of Packaging: Drum Bulk Liquid Solid Size of Container(s) Transfer Equipment Requirements (Dusty, Odlferous, Toxic Volitile Furn	es, Etc.):
Special Requirements:	
	ode(s)
State Hazardous Waste?	
Reactivity: None Pyrophoric Shock Sensitive Exp	closive
Other Hazardous Characteristics. ☐ None ☐ Radioactive ☐ Etiological ☐ Pesticide Manufac	turing Waste
Is this waste product a hazardous material as defined by the	
hazardous material transportation act?*	
If yes, please specify the following:	
Proper D.O.T. Shipping Name:	
D.O.T. Hazard Class:	
D.O.T. Identification Number(s):	
D.O.T. Shipping Container(s):	

*(SEE CFR 49 PART 172.101 FOR HAZARDOUS MATERIALS LIST AND CHARACTERISTICS)

Color: Strc	Specific Gravity	□ 0.65—0.80 [—0.95	☐ 1.06—1.20 ☐ 1.21—1.40	☐ 1.70+ ☐ Exact
Physical State at 70° F:		☐ J.¥6 —1.05	☐ 1.41—1.70	
☐ Solid ☐ Liquid ☐ Powder Phases or Layers: ☐ Homogeneous ☐ Bilayered ☐ Multi-Layered	Flash Point:	☐ 70° F. ☐ 70°F—100°F ☐ 101°F—139°F	☐ 140°F—200°F ☐ 200°F ☐ No Flash	Closed Cup Open Exac
Viscosity: Low Medium High	Melt Point: BTU Value:	F per pour	nd per g	allon
Solids: By Weight By Volume Total %, Dissolved %, Suspended %	5H 4-4: 5			
Free Liquids: Yes No Volume%	PH (Indicate Rang	7.0	□ 12.5 □ N/A	
Weight:	2.1—4.0	□ 7.1—10		_
Lbs./Gallons (Liquid) Lbs./Cubic Foot (Solids) Solvent Recovery	4.1—6.9	☐ 10.1—12.5		
Still Bottom Type: Resinous Oily				
H. CHEMICAL COMPOSITION (Totals Must Add to 100%) Water Content %		(PPM) EPA Ex		ng/L)
		·)		
%		Cd)	· -	
%	Chromium ((Cr)		
%		g)		
%	Lead (Pb)		Chromium-Hex	(Cr + 6)
%	Other Comp	onents - Total (Pi	•	
%	Cvanides			
%	•			
I. SAMPLING INFORMATION:				
Date Sampled: Time of Day				
Type of Container:			Size: _	
Type of Sampling Device:				·
Were the Container and Sampling Device Clean? Yes Method of Sampling:				Other
Personnel: Sampler - (Please Print)			· · · · · · · · · · · · · · · · · · ·	
	ed 🗆 Outside	Outside But Under	Roof	
J. SPECIAL HANDLING INFORMATION				
			Additional Pa	ge(s) Attached
K. CERTIFICATION: I THE UNDERSIGNED. AN EMPLOYEE OF THE GITHAT THE SAMPLE DEFINED HEREIN IS A TRUE CROSS SECTIONAL SAMPLE DEFINED IN PARAGRAPH 8 HEREIN, AND THAT I HAVE EXAMINED AND AM FAMILITO THE BEST OF MY KNOWLEDGE IT IS TRUE AND CORRECT, AND THAT ALL KNOWLEDGE IT IS TRUE AND CORRECT.	REPRESENTING ALL PHI IAR WITH THE INFORMATI	YSICAL AND CHEMICAL ON SUBMITTED IN THIS A	. PROPERTIES OF THE AND ALL ATTACHED DO	WASTE STREAM AS
GENERATOR PERSONNEL (SIGNATURE)		(TITLE)	(DATE)	
DISTRIBUTOR SALESMAN IPLEASE PR	INT)		(0	DATE)
L. WASTE SAMPLE QUALIFICATION FEE: \$				
Customer P.O. #	(SI	GNED)		

SEND SAMPLE AND WASTE PROFILE TO: DETREX CORPORATION 12886 Eaton Ave., Detroit, MI 48227 Solvents Division

DETREX CORPORATION



DATE

INCONING		DUTGOI	NG		
GENERATOR					
PRODUCT		MANIFEST NO			
NO. OF DRUMS/BULK		SALESMA			
SAMPLE NO		G.S. NO			
SPECIFIC GRAVI	(TY:	TEMP			
ROTOVAPOR DIST	FILLATION:	QUANTITY	n1		
AIEI	LD:		Percent	Parts	
	PRODUCT				
	WATER				
	OIL				
e g.	SOLIDS				
	(yes)				
	T TEST:POI			't	DEC. I
GAS CENONATOGRAP	H RUN:	REPORT	ATTACHED		-
COMMENTS (VISUAL)				**********
TESTED BY:		_	-		•
SAMPLE SENT 7	ro PAG	E No	_ DATE		

ATTACHMENT C-4

SAMPLE LABORATORY REPORTS

RPB-Brend Trank

TELEPHONE.

(313) 645-0890

DETREX CORPORATION

Solvents & Environmental Services Division

999 Haynes • Suite 305 Birmingham, MI 48008

FAX: (313) 645-1094

June 19, 1992

Mr. Norm Niedergang
Acting Assoc. Dir. Office of RCRA
U.S. EPA
Region V
77 W. Jackson
Chicago, IL 60604

JUN 25 1992

しまでの**す OF** Fi Vva va wada Mine Sion **U.S. EPA_a REGIO**N V

Dear Mr. Niedergang:

Detrex Corporation operates T-S-D Facilities located at the following addresses:

- 2263 Distributors Dr., Indianapolis, IN 46241 (IND 085616837)
- 3114 Cullman Ave., Charlotte, NC 28206 (NCD 049773245)
- 12886 Eaton Ave., Detroit, MI 48227 (MID 091605972)
- 322 International Pkwy., Arlington, TX 76011 (TXD 980626154)
- 3027 Fruitland Ave., Los Angeles, CA 90058 (CAD 020161642)

The abovementioned facilities operate under the provisions of RCRA and are required to comply with these regulations. In an effort to comply with the requirements of 40 CFR 264 Subparts AA and BB, Detrex Corporation has prepared a Leak Detection and Monitoring Program which is consistent with the requirements of the regulations. A copy of the plan, as it pertains to the facility within your jurisdiction, has been enclosed for your review. This plan becomes effective for all Detrex T-S-D Facilities as of this date. The supporting data and subsequent reports will be forwarded from the facility in the near future.

If you have any questions, comments, or concerns, please feel free to contact me at your convenience.

Sincerely,

DETREX CORPORATION

Ronald E. Swan, Jr.

Manager of Engineering

RES/ds

enc.

DETREX CORPORATION HAZARDOUS WASTE TREATMENT-STORAGE-DISPOSAL FACILITY LEAK DETECTION AND MONITORING PROGRAM

Introduction

Detrex Corporation operates nine (9) permitted T-S-D facilities in the United States. Of these, five (5) actually process hazardous wastes on-site. The waste codes which are processed are F001 and F002. As characteristic wastes, it is known by definition that these wastes contain in excess of 10 parts per million of hazardous waste constituents. Since the same wastes are processed in recycling units on-site, the processing equipment, piping, valves pumps and ancillary equipment are also known to come in contact with hazardous waste containing in excess of 10 ppm of hazardous waste constituents. Therefore, it is not necessary for Detrex facilities to make this determination as part of the Leak Detection and Monitoring Program.

A review of the literature¹ indicates that the waste streams which Detrex processes (F001 and F002 containing Trichloroethylene, 1,1,1-Trichloroethane, Methylene Chloride, Tetrachloroethylene, and Trichlorotrifluoroethane) have one or more of the components in the stream with a vapor pressure of greater than 0.3 kilopascals at 20°C. Hence, the processing equipment is known to be in light liquid service.

The Charlotte, N.C. facility utilizes a LUWA Solvex System for recycling chlorinated solvent from the waste. The unit operates at least 5kPa below ambient pressure and, as such, is defined as operating in vacuum service. The equipment operating "in vacuum service" is identified by the manufacturers original bill of material tag number.

The Detroit, MI facility utilizes a regenerative carbon adsorption control device and complies with the requirements of 40 CFR 264.1032(a)($\frac{2}{2}$). This facility is required to comply with the standards outlined in 40 CFR 264.1035(F) which are outlined in a separate portion of this program. All other Detrex TSD Facilities comply with the RCRA requirements² which is the primary emphasis of this program.

Scope

Based on the requirements of 40 CFR 264 (265) Subpart BB, Detrex Corporation Solvents and Environmental Services Division, Engineering Department will conduct the following:

1. Affix a tag, which has a unique identification number, to each "piece" of equipment to be monitored under this program.

Page: 2 of 5 Date: 6/18/92 Revision: 0

- 2. Identify equipment that is operated in vacuum service and exclude from the requirements of this program.
- 3. Identify pump(s) which may be exempt as follows:
 - a) Each pump equipped with a dual mechanical seal that includes a barrier fluid system is exempt provided the following requirements are met:
 - (1) Each dual mechanical seal system must be
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or
 - (ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 264 (265).1060, or
 - (iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.
 - (2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.
 - (3) Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 - (4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
 - (5) (i) Each sensor as described in paragraph (3) above, must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.
 - (ii) Determine, based on design consideration and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
 - (6) (i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, or both based on the criteria determined in paragraph (5)(ii) above, a leak is detected.
 - (ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 264 (265).1059.
 - (iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (b) Any pump that is designated with "non-detectable emissions" as per 40 CFR 264.1064(g)(2), as indicated by an instrument reading of less than 500 ppm above background, is exempt from: (a) monthly monitoring requirements, (c) repair within 15 days after a leak is detected, and (d) dual mechanical seal requirements in parts 1-6iii above provided that the pump meets the following requirements:

Page: 3 of 5 Date: 6/18/92 Revision: 0

- (1) Must have no externally actuated shaft penetrating the pump housing.
- (2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR 264.1063(c).
- (3) Must be tested for compliance with paragraph (b)(2) of this section initially upon designation, annually, and at other times as requested by the regional administrator.
- (c) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal(s) to a control device that complies with the requirements of 40 CFR 264.1060, it is exempt.
- Identify pumps which are required to be monitored as per the requirements of Subpart BB (the balance of the pumps in contact with hazardous waste after 3. above).
- 5. Identify compressor(s), if any, which are required to be monitored as per the requirements of Subpart BB.
- 6. Identify pressure relief device(s), if any, which are required to be monitored as per the requirements of Subpart BB.
- 7. Identify sample connecting system(s), if any, which are required to be operated as per 40 CFR 264.1055 (a) (c).
- 8. Identify open ended line(s) and valve(s), if any, which are required to be operated as per 40 CFR 264.1056 (a) (c).
- 9. Identify valves in gas/vapor or in light liquid service which are required to be monitored annually through use of the Valve Monitoring Rational Diagram (attached).
- 10. Identify remaining valves to be monitored as per the requirements of 40 CFR 264.1063 (b) delineated in this plan.
- 11. Identify sampling connecting system(s), if any, which are required to be operated as per the requirements of 40 CFR 264.1055 (a) (c).
- 12. Perform leak detection monitoring of all equipment as follows:
 - (a) Initially for pumps, compressors, pressure relief devices, and valves which are designated as operating with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 264.1063(c)

Page: 4 of 5 Date: 6/18/92 Revision: 0

- (b) Monthly for pumps identified in item 4, and for valves requiring to be monitored monthly due to: failure to meet annual monitoring requirements from Valve Monitoring Rational or valves for which a leak has been detected within the last two months.
- (c) The first month of the quarter, and every succeeding quarter, for valves which a leak has not been detected for the previous two months but in the last three months.
- (d) Semi-annually when the percentage of valves leaking is equal to or less than 2 percent when quarterly monitoring indicates that the percentage of valves leaking is less than 2 percent.
- (e) Annually for pumps, compressors, pressure relief devices and valves designated as operating with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 264.1063(c), and for valves requiring annual monitoring as indicated by the Valve Monitoring Rationale.

Summary

The Leak Detection and Monitoring Program was developed and implemented to bring Detrex TSDF's into compliance with the requirements of 40 CFR 264 Subparts AA and BB. The program incorporates by reference the definitions, procedures, and methods specified in 40 CFR 264.1030 through 1065 and 40 CFR 60 Method 21. This procedure was developed for the gathering of data required in the aforementioned. The record keeping and reporting functions required in Subparts AA and BB are left to the Facility and/or Risk Management Group(s) of the Detrex Corporation.

The test methods utilized shall follow either the instrument detection method or the alternative screening procedure as defined in the regulations.³ All analytical test methods will comply with the procedures delineated in the standards.^{4,5,6,7,8}

Due to the changing needs of federal and state governing authorities, this program may be subject to revision based on changes/revisions in the regulations.^{2,3} Subsequent revisions in this program will be published and distributed by Detrex Corporation, Solvents and Environmental Services Division, Engineering Department.

Page: 5 of 5 Date: 6/18/92 Revision: 0

REFERENCES

¹ Handbook of Chemistry and Physics, 55th Edition, Chemical Rubber Company, 1974

²Code of Federal Regulations, Title 40 - Protection of Environment, Parts 260 to 299, Office of the Federal Register, July 1, 1991

³Code of Federal Regulations, Title 40 - Protection of Environment, Part 60, Method 21, Office of the Federal Register, July 1, 1991

⁴American Society for Testing and Materials, Method D 2879-86, ASTM, December, 1986.

⁵American Society for Testing and Materials, Method D2267-88, ASTM, December, 1988

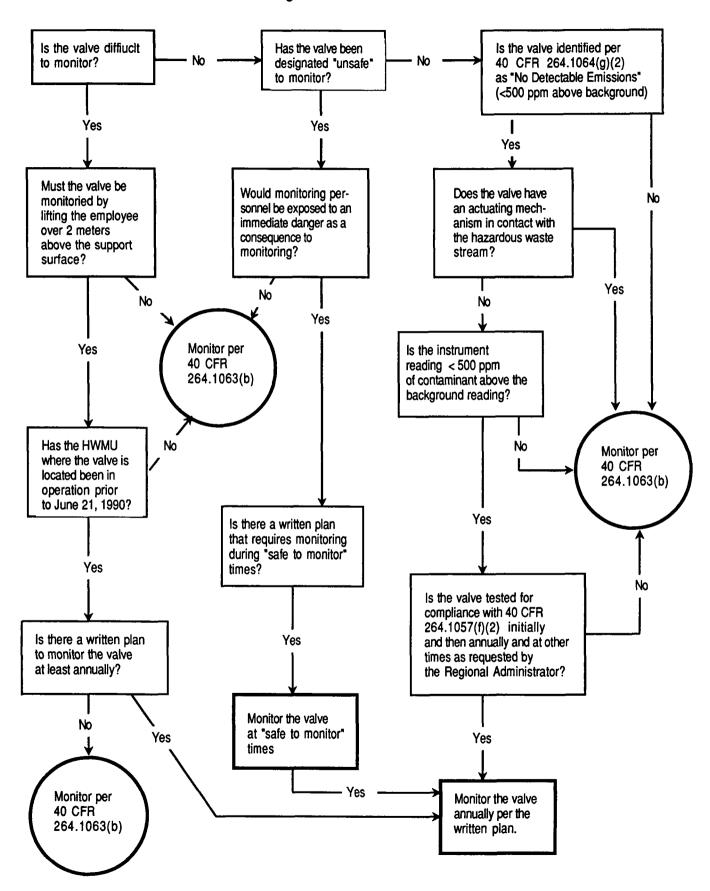
⁶ American Society for Testing and Materials, Method E168-88, ASTM, July, 1988

⁷American Society for Testing and Materials, Method E169-87, ASTM, April, 1987

⁸ American Society for Testing and Materials, Method E260-91, ASTM, March, 1991

Appendix 1 Valve Monitoring Rationale

Valve Monitoring Procedure and Rationale



Appendix 2

Alternative Screening Procedure Rationale

Appendix 3

Facility Equipment Leak Detection Work Sheets

Date: Page 1
Test Number:

Time:

Date:

Tag Number	<u>Valve</u> Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
001		Camlock fitting outlet on F002 inlet Diaphragm pump			
002		Inlet valve and camlock to F002 line to still. (1" copper sweated line)			
003		Inlet at Still: union and threaded fitting			
004		North flange at steam coils- tagged on inlet steam line			
005		South flange at steam coils- tagged on inlet steam line			
006		Clean out door on still			
007		Outlet line from cleanout area			
008		Outlet line from still to DCI. Tee/valve/plug			
009		Inlet line to filter at DCI. 2 elbows/valve			

Complete By:_

Date: Page 2
Test Number:

Tag Number	<u>Valve</u> Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
010		DCI inlet filter top flange			
011		Filter outlet- union/valve/t/valve/autovalve			
012		Recycle zone from main drain flange at DCI			
013		Inlet zone to diaphragm feed pump on DCI			
014		Outlet at diaphragm feed pump to feed at DCI cleanout flange			
015		DCI cleanout flange on north end of DCI			
016		DCI cleanout flange, south end of DCI			
017		Flange on cone discharge of DCI, south end			
018		Discharge area to F002 dump pump below discharge cone. Zone includes all from flange to centrifugal pump			
		Complete By:		Date:	Time:

Date: Page 3
Test Number:

Time:

Date:

Tag Number	<u>valve</u> Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
019		Discharge pump: 1.5" Burks centrifugal			
020		F002 discharge line at pump			
021		Pump discharge to main F002 line junction			
022		1.5" F002 line to truck loading area. Coupling			
023		Discharge end of F002 line. Valve/camlock/cap			
024		F002 line- union behind (east) of product driers			
025		F002 tank line coupling/3elbows			
026		Bottom inlet to F002 tank, north end			
027		F002 Tank: North end bottom sight glass assembly			

Complete By:_

Date: Page 4
Test Number:

Tag Number	<u>Valve</u> Size-Mig-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
028		F002 Tank: Upper sight glass assembly			
029		Nipple and valve: 4th from top, north end			
030		Nipple and valve: 3rd from top, north end			
031		Nipple and valve: 2nd from top, north end			
032		Nipple and valve: top, north end			
033		F002 Tank vent cap (street elbow) at north end			
034		F002 Tank: High level alarm nipple on top of tank, midway from ends			
035		F002 Tank: Inlet from S-600 still to tank, south end of tank			
036		F002 Tank: Line coupling on inlet line from still			

Complete By:_____Date:_____Time:____

Date: Page 5
Test Number:

Date:

Time:

Tag Number	<u>Valve</u> Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
037		F002 Tank: Valve and Tee at north end of tank			
038		F002 Tank: Auxillary Inlet line from still: northwest corner of tank			
039		F002 Tank: Cleanout flange at south end of tank			
040		S-600 still F002 outlet on west side of still at steam injection header			
041		RESERVED			
)42		RESERVED			
043		RESERVED			
044		RESERVED			
045		RESERVED			

Complete By:_

Tag Number Size-Mig-Type Location Description Test Result Five Day Action Fifteen Day Action RESERVED RESERVED RESERVED RESERVED RESERVED

Indianapolis Branch AA/BB

Complete By:______Date:_____Time:_____

Date:

1

Page 6

Date: Page 1
Test Number:

Tag Number	<u>Yalve</u> <u>Size-Mig-Type</u>	Location Description	Test Result	Five Day Action	Fifteen Day Action
301	1.25" Nibco Gate Valve	Inlet to still Zone 002			
302	3" Hammond Gate valve	East side drain on still- fill to DCI			
303	1.5" Nib∞ gate valve	Drain line to fill DCI			
304	1.5" Nibco Gate valve	Zone 008 open drain valve to clear line			
305	1" Gemini Ball Valve	Filter outlet in Zone 011			
306 ,	1" Gemini Ball Valve	Open sample line in Zone 011			
307	1" Raymond Ball Valve	Air actuated feed valve in Zone 008 feed line			
308	1" Grinnell gate valve	Drain valve, Zone 013			
309	1" Grinnell gate valve	Inlet to Diaphragm pump, Zone 013			

1	Complete	Ву:	Date:	Time:	

Date: Page 2
Test Number:

Date:

Time:

Tag_Number	Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
310		Wilden M-4 1" Diaphragm feed pump to DCI, Zone 014			
311	1" Apollo Ball Valve	Drain line, Zone 14			
312	8" Unknown Butterfly Valve	Automatic air actuated valve on cone discharge on south end of DCl, Zone 017			
313	2" Nibco Gate Valve	Discharge line from DCI, Zone 018			
314	2" Unknown "Y" strainer	Discharge line from DCI, Zone 019			
315	1" Watts ball valve	Valve to check line			
316	1" Unknown Ball valve	Automatic air actuated valve for recirculation in DCI			
317	1.5" Unknown Check Valve	F002 dsischarge line, Zone 019			
318	1.5" Unknown Ball valve	To F002 main line			

Complete By:_

Date:	Page	3	
Test Number:			٠

THE REPORT OF THE PARTY OF THE

	Valve				
Tag Number	Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
319	1.5" TCM gate valve	Truck fill line at end, Zone 023			
320	1.5" TCM gate valve	Bottom inlet to F002 tank, north end, Zone 026			
321	2" Hammond gate valve	F002 discharge at north end of F002 tank, Zone 026			
322	.75" Worchester Ball Valve	Bottom sight glass drain line on F002 tank, north end, Zone 026			
323	2" Crane Ball Valve	Hose discharge from F002 tank, Zone 026			
324	.5" Cli globe valve	Bottom sight glass valve, Zone 027			
325	.5" Cli globe valve	Upper sight glass valve, Zone 028			
326	.75" Nibco gate valve	Upper sight glass assembly, Zone 028			
327	.5" CII globe valve	Lower manual sight glass, Zone 028			

Complete	Ву:	Date:	Time:	

Date:	Page 4
Test Number:	

Tag	Number	<u>Yalve</u> Size-Mfg-Type	Location Description	Test Result	Five Day Action	Fifteen Day Action
328 329		.75" Crane ball valve	4th nipple from top of F002 tank, north end, Zone 029			
329		.75" Crane ball valve	3rd nipple from top of F002 tank, north end, Zone 030			
330		.75" Crane ball valve	2nd nipple from top of F002 tank, north end, Zone 031			
331		.5" Cli globe valve	Top nipple on north end of F002 tank, Sight glass valve, Zone 032			
332		1.5" Crane Ball Valve	Top inlet fill line to F002 tank from Drums, Zone 037			
333		1.5" Crane Ball Valve	Bottom inlet to F002 tank from Drums, Zone 038			
334		3" Hammond Gate Valve	Still drain line, Zone 040			
335		1.5" Hammond Ball Valve	Still drain line to drums			
336		.75" Unknown Check Valve	Steam injection line to Still, Zone 040			

Complete	Ву:	Date:	Time:	

Date:	Page 5	
Test Number:	7	

Valve
Tag Number Size-Mfg-Type

Location Description

Test Result

Five Day Action

Fifteen Day Action

337

2" Sandpiper Diaphragm pump for F002 from Drums, Zone 001

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION

LARRY DEVUYST PAUL EISELE GORDON E. GUYER IAMES P HILL DAVID HOLLI O STEWART MYERS JOEY M SPANO



EGEIVE 9 1992

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

Stevens T Mason Building, P O Box 30028, Lansing, MI 48909

ROLAND HARMES, Director

Waste that OF Free Unition U.S. EPA, REGION V.

June 5, 1992

CERTIFIED MAIL

Mr. Bill Moore Corporate Engineering & Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48606-5111

Dear Mr. Moore:

SUBJECT: Operating License Waiver of Appeal Rights

Detrex Corporation, MID 091 605 972

Enclosed please find a copy of the final draft Operating License for the hazardous waste tank and container storage activities at the subject facility which was prepared pursuant to Michigan's Hazardous Waste Management Act, 1979 P.A. 64, as amended; and a waiver of administrative appeal The waiver indicates that Detrex Corporation will not administratively appeal the Operating License if issued as currently written.

The exact wording included in this form must be used. have a responsible corporate officer, as defined in 40 CFR §270.11, sign the form and return it no later than June 12, 1992.

If you have any questions regarding this waiver form, please contact me.

Sincerely,

Ronda L. Hall

Route St. Haer

Environmental Engineer Waste Management Division

517-373-9548

Enclosures.

cc: VMr. Rich Traub/Ms. Shari Kolak, U.S. EPA

Mr. Ken Burda, DNR Mr. Steve Buda, DNR

Mr. Don Mbamah, DNR-Livonia

Operating License File

STATE OF MICHIGAN



NATURAL RESOURCES COMMISSION

ARRY DEVUYST
UL EISELE
"RLENE J FLUHARTY
RDON E GUYER
AVID HOLLI
O STEWART MYERS
RAYMOND POUPORE

...

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING PO BOX 30028 LANSING, MI 48909

ROLAND HARMES, Director

April 7, 1992

Mr. Bill Moore Corporate Engineering & Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48606-5111

Dear Mr. Moore:

SUBJECT: Draft Operating License and Waiver of Appeal

Rights, and Hazardous Waste Management Permit

Detrex Corporation, MID 091 605 972

Enclosed please find copies of the following documents:

- The draft Operating License for the hazardous waste tank and container storage units at the subject facility prepared pursuant to Michigan's Hazardous Waste Management Act, 1979 P.A. 64, as amended (Act 64);
- 2. The draft federal Hazardous Waste Management Permit prepared pursuant to the Resource Conservation and Recovery Act (RCRA), as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA);
- 3. The public notice announcing the Michigan Department of Natural Resources' and United States Environmental Protection Agency' (U.S. EPA) intent to issue the Operating License and federal Hazardous Waste Management Permit, respectively; and
- 4. The Fact Sheet regarding the facility and the draft Operating License and the federal Hazardous Waste Management Permit.

The draft federal Hazardous Waste Management Permit is being transmitted to Detrex Corporation on behalf of the U.S. EPA.

As noted in the attached public notice, a public hearing will be held on May 21, 1992, to receive comments on the proposed licensing and permitting actions.

Mr. Bill Moore -2-April 7, 1992 Comments regarding the draft Operating License and draft federal Hazardous Waste Management Permit should be submitted in writing to me. All comments must be received by June 5, 1992. If you have any questions, please contact me.

Sincerely,

Konda L. Hair Ronda L. Hall

Environmental Engineer Waste Management Division

517-373-9548

Enclosures

Mr. Rich Traub/Ms. Shari Kolak, U.S. EPA

Mr. Ken Burda, DNR

Mr. Steve Buda, DNR Mr. Don Mbamah, DNR-Livonia

Operating License File Corrective Action File



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LARRY DEVUYST
UL EISELE
JRLENE J FLUHARTY
ORDON E GUYER
AVID HOLLI
O STEWART MYERS
RAYMOND POUPORE



JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING PO BOX 30028 LANSING, MI 48909

ROLAND HARMES, Director

April 7, 1992

CERTIFIED MAIL

Mr. George Gaines Detroit Department of Health 1151 Taylor Street Detroit, Michigan 48202

Dear Mr. Gaines:

SUBJECT: Detrex Corporation, Detroit, Michigan

MID 091 605 972

Detrex Corporation (Detrex) has submitted an operating license application for the hazardous waste tank and container storage units at its facility located at 12886 Eaton Avenue, in Detroit, Michigan. The Michigan Department of Natural Resources (MDNR) has prepared a draft Operating License and a draft federal Hazardous Waste Management Permit for the facility. The draft Operating License has been prepared in accordance with Michigan's Hazardous Waste Management Act, 1979 P.A. 64, as amended (Act 64), while the draft federal Hazardous Waste Management Permit has been prepared in accordance with the federal Resource Conservation and Recovery Act (RCRA), as amended.

Enclosed is a copy of the draft Act 64 Operating License, the draft federal Hazardous Waste Management Permit, the facility fact sheet, and the public notice announcing the MDNR and U.S. Environmental Protection Agency's intent to issue the license and permit, respectively. The public notice is scheduled to appear in the <u>Detroit News/Free Press</u>, Detroit Zone on April 16, 1992. Please make all of the above referenced documents available for public review.

Thank you for your cooperation in this matter. If you have questions regarding the facility or any of the enclosed information, please contact me.

Sincerely,

Ronda L. Hall

Environmental Engineer Waste Management Division

517-373-9548

Enclosures

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cc: Operating License File

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE: March 17, 1992

SUBJECT: Detrex Corporation

MID 091 605 972 Draft HSWA permit

FROM: Shari Kolak, Geologist

RCRA Permitting Branch

TO: Ronda Hall, Environmental Engineer

Michigan Dept. of Natural Resources

Enclosed is a copy of the draft HSWA permit for Detrex Corporation, Solvents and Environmental Services. The boilerplate permit and Attachments I-IV are included on the enclosed computer disk. I formatted the disk using Format B: Low density; the text is in Wordperfect 5.1. I included this information in case you have any questions. This time I hope we don't have any computer compatibility problems but if we do, please call me and we will work something out.

Overall, I made several changes to your original draft HSWA permit. At this point, it is impossible to list all of them, but I can send you a copy of my corrections if you feel that it is necessary. As I stated in a previous telephone conversation with you, changing the current federal boilerplate language will most likely hold-up the review process. Therefore, I have re-corrected several revisions that you made to the original boilerplate in order to maintain consistency with current federal boilerplate. While I think that the changes you did make were not only correct (e.x. use of state operating license, grammatical and punctuation changes, etc.) and enhanced the boilerplate text, I do not think that now is the best time to make changes for the reasons stated above. After the issuance of the Detrex permit, I think it would be a good idea for RCRA Permitting and MDNR to have a meeting to discuss the changes that you proposed and to combine our efforts to come up with a universal Michigan federal permit boilerplate that includes provisions from both the RCRA Permitting and Enforcement Corrective Action Plan.

For your reference, I have included a brief overview of some additions/deletions that I have made to your draft permit. A summary of these changes is provided below.

Boilerplate

Deleted SWMU certification date

Retained original boilerplate language

Attachment 1

Added some of your permit language to Tasks IA, IV, V, and VI

° Corrected several incorrect references to specific Tasks (This change was made throughout the entire permit, were appropriate)

Attachment 2

- Added Task VIII (Laboratory and Bench Scale Studies)
- Added some of your language to Task XI
- Deleted Section D in Task XI (This modification provision appears in boilerplate)

Attachment 3

Abbreviations for CMI, CMS, O&M, etc., have been spelled out to maintain consistency with current federal boilerplate

Attachment 4

Headings of Tasks I, III, and IV have been changed to be consistent with Standard Condition III.D.

Attachment 5

The Waste Analysis Plan was not included in the copy you sent me

The enclosed draft permit appears to be complete with the exception of the Waste Analysis Plan. I am currently writing conditions to this section, in case you have not done so. In retrospect, I think the draft HSWA permit looks good, including the Corrective Action and Toxicity Characteristic sections. I am interested in your comments/concerns so please call me after you review my revisions. I will be out of the office on March 19th and 20th. I will return on Monday, March 23rd in the afternoon.

cc: Rich Traub

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LARRY DEVUYST
PAUL EISELE
IARLENE J FLUHARTY
3ORDON E GUYER
AVID HOLLI
O STEWART MYERS
RAYMOND POUPORE



JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING PO BOX 30028 LANSING, MI 48909

February 20, 1992

FEB 2 6 1992

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V.

CERTIFIED MAIL

Mr. Bill Moore Corporate Engineering & Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Moore:

SUBJECT: Notice of Deficiency/Letter of Warning

Act 64 Operating License Application Detrex Corporation, MID 091 605 972

The Waste Management Division has completed a technical review of the revised hazardous waste container and tank storage Act 64 operating license application submitted on September 3, 1991, including any subsequent revisions that were submitted.

A list of the revised application deficiencies must be submitted to the Chief of the Waste Management Division by March 20, 1992. Failure to submit a technically adequate operating license application is grounds for denial of the application pursuant to R 299.9518(2)(c) and for termination of interim status pursuant to 40 CFR §270.10(e)(5).

When submitting revisions, please use a replacement page format. The revised pages should be three-hole punched as appropriate and numbered correctly so that they can be placed directly into existing binders. Six copies of the revisions must be submitted. If you have any questions, please contact me.

Sincerely,

Ronda L. Hall

Environmental Engineer Waste Management Division

517-373-9548

Enclosure

cc/enc: Mr. Ronald C. Hritzkowin, Detrex Corporation

Ms. Lorraine Kosik, U.S. EPA

√Mr. Rich Traub/Ms. Shari Kolak, U.S. EPA

Mr. Steve Buda, DNR Ms. De Montgomery, DNR

Mr. Donald Mbamah, DNR-Livionia

Operating License File

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NOTICE OF DEFICIENCY

Act 64 Operating License Application Technical Review III

Detrex Corporation (Detrex)
Solvents and Environmental Services Division
12886 Eaton Avenue
Detroit, Michigan 48227

MID 091 605 972

February 20, 1992

The Michigan Department of Natural Resources, Waste Management Division (WMD), has completed a technical review of the revisions to the Act 64 operating license application submitted by Detrex on September 3, 1991. A list of the application deficiencies is provided below.

I. Section-Specific Application Deficiencies

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- A. Section D Process Information, R 299.9508(1)(b), R 299.9504(1)(g), R 299.9504(2), and R 299.9504(3)
 - Current, accurate engineering plans of all process equipment and secondary containment structures at the facility must be included in the application. This includes the general facility layout, the hazardous waste container storage unit, the hazardous waste storage tanks, and the unloading/loading area.
 - a. The plan of survey provided by Warner, Cantrell & Padmos, Inc. must be revised to reflect the upgraded design of the unloading/loading area containment system. Cross-section A-A must be revised.
 - b. The tank engineering drawings contained in Attachment D-6 (HW8518C and HW84206C) of the application are inadequate.
 - 1) The text of the application suggests that the nominal capacity of tank number 22 is 4,000 gallons whereas the drawing for the same tank (HW84206C) suggests that the nominal capacity is 4,500 gallons. This discrepancy must be addressed.

- 2) Drawings HW8518C and HW84206C must be revised as appropriate to reflect the existing tank systems. This includes revising the drawings to reflect the new base design to provide for leak detection and to provide cross sections showing sight glass details.
- c. An accurate as-built engineering drawing for the unloading/loading area must be included in the application. The drawing provided in the application is not adequate. The plans must provide sufficient views, elevations, sections, and layouts. They must include specifications on all construction materials and installation methods.

All of the revised engineering drawings referenced above must contain legends reflecting all of the amendments to the respective drawings and the amendment dates. The drawings should be submitted both in regular engineering drawing size for review and 8.5 by 11 inches or 11 by 17 inches for inclusion in the draft Act 64 operating license.

Additionally, all of the revised engineering drawings must be sealed and certified by a registered professional engineer. A sealed certification statement referring to each drawing by drawing name, number, date, and amendment dates is acceptable.

B. Section G -Contingency Plan, R 299.9508(1)(b), 40 CFR §270.14(b)(7)

In accordance with 40 CFR §§264.37 and 264.52(d), Detrex must supply copies of the contingency plan coordination agreements.

C. Environmental Permits - R 299.9508(1)(b)

1. Review comments received from the Wayne County Department of Public Health (WCDPH), Air Pollution Control Division, indicate that several facility air permit applications are pending. These include applications for the Dyna-500 still, two replacement storage tanks, a replacement mixing/storage tank (specific reference numbers for the tanks were not provided by WCDPH), and the carbon adsorption system. Copies of these air permits as well as any air permits issued to the

facility that were not already submitted with the Act 64 operating license application must be submitted to the WMD.

D. Compliance Schedule - R 299.9508(1)(q)

- 1. Several items at the facility have been identified as needing modification. These items include:
 - a. Repairing any expansion joints and cracks in the tank and container storage units' secondary containment system and sealing the entire secondary containment system with a chemically and abrasion resistant coating.
 - b. Upgrading the unloading/loading area which includes providing the appropriate curbing and other controls to ensure that the area has sufficient containment volume and controls to protect against releases to the environment, and providing the area with a chemically and abrasion resistant coating.

The WMD recognizes that some of the work on the upgrading of the unloading/loading area has been completed. As previously discussed, Detrex must submit engineering drawings of the upgraded unloading/loading area design. Detrex must also submit a work plan outlining how it intends to address the remaining items to demonstrate compliance with the applicable rules. The plan must specify the necessary modifications to any procedure, equipment, process, or portion of the facility, together with the expected dates of completion. Detrex must address how the waste will be handled when the modifications are being completed. In preparing the plan, Detrex must clearly distinguish between existing conditions at the facility and proposed modifications.

Shari Kolak



CONESTOGA-ROVERS & ASSOCIATES LIMITED

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2 (519) 884-0510

August 30, 1991

Reference No. 2471

Ms. Rhonda L. Hall, Environmental Engineer Hazardous Waste Permits Section Waste Management Division Michigan Department of Natural Resources Ottawa Building South 608 West Allegan Lansing, Michigan U.S.A. 48909

Dear Rhonda:

Re: Detrex Corporation

Eaton Avenue, Detroit, Michigan

MID 091 605 972

Response to Notice of Deficiencies

Please find enclosed eight (8) copies of written responses and updated material for inclusion into the Act 64 Operating License Application for the above referenced facility. The material is provided in response to the August 2, 1991 Notice of Deficiency.

A separate envelope contains the certified print or copy of relevant documents as well as a single copy of each figure without Attachment numbers. This is provided for your convenience, as requested during the meeting held in Southfield. Also provided is a brief summary of enclosed material which should assist you in updating the Applications in your files.

Should you have any further questions, do not hesitate to contact William Moore or myself at your convenience.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Bruce McConnell P.Eng.

BMC/jdh/9

Encl.

c.c. William M. Moore Jr., Detrex Ronald Hritzkowin, Detrex Issa Shamiyeh, Detrex RECEIVED

CEP 40 1991

Waste Management Division

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OPERATING LICENSE APPLICATION REVISED MATERIAL

Introduction

page revised

Section A

page A-4 revised.

Attachments A-1 and A-2 revised.

Section B

pages B-5,6, and 10 revised.

Attachments B-8 and B-9 revised.

Section C

entire text revised.

Attachment C-3 revised SOP for G/C analysis.

Attachment C-4 added Waste Compatability review.

Attachment C-6 revised text.

Section D

entire text revised.

Attachment D-1 revised.

Attachment D-2 new drawing provided "Loading Area Containment Structure" the "Flammable Liquids Loading Dock" drawing should be removed.

Certification provided.

Section E

Not revised. Should be recognized as revised per

remainder of permit as appropriate. (i.e. facility drawings

and clean-up procedures).

Section F

pages F-2,5,7,8,11,12,13 revised.

all Attachments revised.

Section G

entire text revised.

all Attachments except Attachment G-2 revised.

Section H

page H-6 revised.

Attachment H-1 revised.

Attachment H-2 (text and Appendix 1) revised.

Section I

entire section revised.

Section J

Not revised. Should be recognized as revised per remainder of permit as appropriate.(i.e. facility drawings and clean-up procedures).

Section K

entire section revised.

I. SECTION SPECIFIC DEFICIENCIES

A. Section A - Act 64 Operating License Application

Response I.A.1

The reference to the transfer facility on page A-4 of the application has been removed from the operating licence application. The transfer facility operates independently from the TSD facility

Response I.A.2

The contact information on the application form have been revised to reflect the fact that Mr. William M. Moore, Jr., is the Corporate Manager of Environmental Compliance, RCRA Section.

Response I.A.3

The facility's mailing address has been corrected to Southfield, Michigan.

Response I.A.4

The list of air pollution permits provided in Section A of the application have been revised to include reference to APC5-02469 and the installation permit for the Dyna- 500 Unit.

Response I.A.5

Form 3, Section V of the application form has been revised to include the S02 process code for tank storage.

Response I.A.6

- a) The list of process equipment has been corrected to reflect the fact that tank number 4 has a capacity of 10,000 gallons.
- b) The application has been revised to reflect that tank number 12 has a nominal capacity of 2,300 gallons. A correction has also been made to reflect tank number 22's design capacity of 4,500 gallons.
- c) The reference to "temporary storage" of still bottoms in tank number 17 in the list of process equipment has been replaced with a



SEP 63 1991

Waste Management

reference to "accumulation" of still bottoms to indicate that waste is maintained on site for less than 90 days.

- d) It is true that there are a number of discrepancies between the capacities noted in the list of process equipment and the capacities noted in the air pollution permits. However, in almost every case the capacity noted in the permit is greater than or equal to the actual process equipment capacity. If required by the WMD, Detrex will approach the Wayne County Department of Health to correct the capacities recorded on the air pollution permits.
- e) The primary Standard Industrial Classification (SIC) Code noted on the facility's wastewater permit has been added to Form 1, Section VII of the application form. SIC Code 5161 represents Chemical and Allied Products Wholesale Distribution.

B. <u>Section B - Facility Description</u>

Response I.B.1

Section B-1 of the application has been revised to include the SIC code as noted in the facility's wastewater discharge permit.

Response I.B.2

Attachments in Section B, as well as other appropriate figures in the application, have been revised to reference the changes to the secondary containment system for the loading/unloading area. As requested during the meeting in Southfield, one copy of each type of figure without Attachment number, has been provided separately for your convenience.

Response I.B.3

The location of the product blending vessel located along the eastern wall of the facility has been added to Attachment B-9 and other figures as appropriate. It is to be noted that this unit is not part of the hazardous waste container or tank storage operations nor the solvent recovery (recycling) process.

C. Section C - Waste Characteristics

Response I.C.1

The reference to "storage" on page C-4 has been replaced with the term "accumulation". This change has been made throughout the application.

Response I.C.2.

Section C-1a has been modified to indicate that, in addition to annually, the waste streams will be re-characterized when Detrex is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and when the results of waste shipment inspections indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest.

Response I.C.3.

Section C1-b has been revised to address bulk shipments of hazardous waste received at the facility.

Response I.C.4

Section C1-b has been revised to state that a composite sample of up to a maximum of 10 drums per waste type per individual generator will be collected for analytical testing.

Response I.C.5.

The waste analysis plan has been revised to state that each container of waste or bulk shipment of waste received at the facility will be analyzed for ignitability.

Response I.C.6.

The waste compatibility review completed on behalf of Detrex Corporation has been added to Attachment C-4. A waste compatibility discussion has been added to Section C-1c.

Response I.C.7.

The waste analysis plan has been revised to state that wastes deemed unacceptable at the facility are either returned to the original generator, or the manifest and land disposal restriction certificate are corrected, as appropriate, and the waste is transported off Site by Detrex Corporation to a properly permitted facility.

Response I.C.8.

The discussion of waste characterization parameters and rationale has been revised to more clearly indicate procedures that are followed.

Response I.C.9.

The reference to Section C-2d has been corrected to C-3d.

Response I.C.10:

In the event a positive result is observed during an ignitability test, the specific drum or bulk shipment will immediately be rejected and handled accordingly.

Response I.C.11:

Section C-3b has been updated to address bulk shipments of waste received at the facility.

Response I.C.12:

The determination of all organic constituents included in the parameter list including stabilizer compounds and "other compounds" are included in the "Determination of Solvents in Spent Solvents By Gas Chromatograph" method. The SOP for this method was included. The method for determination of non-volatile residue (NVR) is included under the SOP for Extraction of Spent Solvents.

Response I.C.13:

Section C-3d has been revised, as appropriate, to be consistent with previous sections of the waste analysis plan.

Response I.C.14:

A discussion has been added regarding TCLP and EP Toxicity analysis. Generally, the hazardous waste generator utilizes process knowledge rather than analytical procedures to determine that wastes are characteristically hazardous.

Response I.C.15.

Section C-3f has been deleted from the text.

Response I.C.16.

Matrix spike samples are analyzed once per week. Attachment C-3 has been revised accordingly.

Response I.C.17.

Attachment C-4 has been updated to include information regarding the results of the compatibility testing.

Response I.C.18.

Section 3.2 of Attachment C-6 now states the fact that only samples from the same generator and of the same waste type are composited.

D. <u>Section D - Process Description</u>

Response I.D.1:

The discussion on clean-up of released waste and decontamination in Section D-1a(4) has been revised to clarify waste material management.

Response I.D.2:

- a. A new drawing of the upgraded loading-unloading area has been provided in Attachment D-2. This plan provides suitable cross-sectional information. A separate engineering certification has also been included.
- b. The referenced drawing has been included on the separate engineering certification.
- c. The "Flammable Liquids Loading Dock" drawing has been removed from the Operating License Application since this unit is not part of the facilitys' TSD operation.

Response I.D.3:

Drums are stacked using wooden pallets. All appropriate references in the application have been revised.

Response I.D.4:

The process flow diagram has been revised to show pump and valve locations as well as distinguish between hazardous waste and product lines. Detrex does manage the still bottoms waste remaining after processing and accumulated in Tank number 17 in accordance with all state and federal regulations.

Response I.D.5:

- a. A copy of a signed and sealed letter is provided from Randers
 Engineering, Inc. regarding the remedial work conducted on the subject
 tanks to make them certifiable.
- b. A copy of a certification including methylene chloride for the subject tanks is provided.

- c. Information noting the dimensions of the tanks has been added to Section D-2a.
- d. 1. An engineering certification of all drawings has been provided separately
 - 2. The capacity of tank number 22 has been corrected to 4,500 gallons in accordance with the tank drawing. The tank will, however, be operated as a 3,600 gallon tank.
 - 3. A new tank certification has been provided from Randers Engineering.
 - 4. The new tank certification addresses the integrity of the tanks recognizing their intended use.
 - 5. A Randers Engineering letter has been included which describes the structural support improvements completed on the hazardous waste storage tanks.
 - 6. The coils within tank number 12 provide a means to add heat to the waste solvent within the tank prior to recovery (recycling). The heat could allow a highly viscous waste material to flow more readily to the process equipment, however the coils are not critical to the operation and are generally never utilized.
 - 7. A suitable leak detection system has been incorporated into the tank support system to provide for detection of failure of the primary secondary containment system of the tanks. A compliance schedule is not required.
 - 8. The tank drawings have been corrected to include the locations of the sight glasses. The sight glasses are orientated on the side wall of each tank in an area that is readily observable for the operator yet protected from accidental breakage.

Section E - Environmental Monitoring Program

Response I.E.1

- a) The secondary containment system will be upgraded in accordance with an MDNR-WMD approved plan subsequent to the receipt of analytical results from the background data collection program.
- b) A WMD approved background soil and groundwater data collection program has been conducted by Detrex to determine the existing quality of the groundwater and soil at the facility. Detrex is presently awaiting receipt of analytical results from the sampling program conducted August 16, 1991. The data will be provided to the WMD by September 20, 1991.

Response I.E.2

This was addressed in a letter from CRA (Brian Sandberg) addressed to Nadine Romero. A copy has been provided with these responses.

Response I.E.3

This was also addressed in the above mentioned letter to Nadine Romero.

Section F- Procedures to Prevent Hazards

Response I.F.1

The sentence has been revised. In addition, the transport vehicle inspections have been referenced as appropriate throughout Section F.

Response I.F.2

The inspection schedules provided in Attachment F-3 have been revised to include the date that the remedial action was completed.

Response I.F.3

The daily inspection form has been revised to include the time that the inspection was completed.

Response I.F.4

The main electric disconnect (MED) has been noted on the figure in Attachment F-4.

Response I.F.5

A new inspection record has been added to Attachment F-3 covering the inspection of transport vehicles after every shipment of wastes received at the facility. Also, the inspection of the loading/unloading area has been moved to this inspection record.

Section G - Contingency Plan

Response I.G.1

The word "stored" has been changed to "accumulated".

Response I.G.2

A new table (Table G-1) has been added identifying all wastes permitted for storage in the facility. This has resulted in renumbering the other two tables in the Contingency Plan and renumbering all pages.

Response I.G.3

Item B.2 has been revised by removing the wording "is extremely remote".

Response I.G.4

A discussion has been added to explain the management of spilled material including confirmation sampling.

Response I.G.5

The list of emergency equipment has been expanded to provide a more detailed description of equipment types and capabilities.

Response I.G.6

All emergency equipment has been noted on Attachment G-3 including the MED.

Response I.G.7

The revised contingency plan will be supplied to all appropriate authorities by Detrex upon approval of the plan by the WMD. Coordination agreements will be requested of the appropriate authorities and copies supplied to the WMD.

Section H - Personnel Training

Response I.H.1

All references to the branch manager and emergency coordinator have been changed to facilities manager as listed in the job description.

Response I.H.2

The facilities manager job description has been revised.

Response I.H.3

- a. The reference to "Facility Part B Application" has been deleted from the quality control coordinator job description.
- b. The reference to flammable wastes has been removed from the job description. The Transfer Facility operates independently of the TSD facility.
- c. The job description for the quality control coordinator has been updated to include skills, education and other qualifications required.

Response I.H.4

This job description can not be easily revised since it is contained within the union contract for employees holding the position. Detrex does not require specific educational background for employees applying for the position. The title "Knowledge" has been changed to "Requisite Skills and Education".

Response I.H.5

The reference to corrosive wastes pertains to the operation of the Transfer Facility. Corrosive or flammable wastes are <u>not</u> stored within the hazardous waste container storage area or hazardous waste storage tanks at the facility.

Section I - Closure and Post-Closure Plan

Response I.I.1.

The word "stored" has been changed to "accumulated".

Response I.I.2.

The reference to the post-closure plan has been deleted.

Response I.I.3.

A listing of certification items has been provided.

Response I.I.4.

The sweepings and wash water will be characterized as F002 waste based on the materials historically stored at the facility. The management of these wastes has been clarified in Section I-1d(1).

Response I.I.5.

The analytical parameters, method of analysis and detection levels have been provided.

Response I.I.6.

A contingent soil sampling plan in the event that significant cracks are discovered in the secondary containment system during closure has been provided. In the event detectable levels of organic constituents are identified, a plan of remediation would be developed and reviewed and approved by the WMD prior to implementation.

Response I.I.7.

The time frame specified in Section I-1e has been changed to 45 days.

Response I.I.8.

Sections I-2, I-6 and I-7 have been deleted.

Response I.I.9.

The reference to treatment in Section I-3 has been deleted.

Section K - Manifesting, Record Keeping, and Reporting

Response I.J.1.

Detrex will provide any transporter other than itself one copy of the signed manifest upon approval to unload wastes.

Response I.J.2.

The paragraph has been revised to state that all of the applicable information outlined in R 299.9609(1) will be maintained in the operating record until closure of the facility.

Response I.J.3.

Item 1, Section K-2, has been revised to state that description and quantity information will include cross-references to specific manifest document numbers and dates of receipt.

Response I.J.4.

Item K-4, Section K-2, has been revised to state that the records for all former employees will be maintained for three years, and that records for all current employees will be maintained until closure of the facility.

Response I.J.5.

Section K-2 has been revised to state that any monitoring, testing or analytical data required by the operating license, and the notices to the generators referenced in 40 CFR §264.12(b), will be maintained in the operating record until closure of the facility.

Response I.J.6.

Section K-3b has been revised to provide a list of the items to be included in the biennial report.

Section M - Certification of Capability

Response I.K.1.

The certification of capability statement has been signed and sealed by a registered professional engineer.

Environmental Permits

Response I.L.1.

It is understood that the WMD has been in contact with the Wayne County Department of Health Air Pollution Control Division regarding the status of the relevant facility air permits. Detrex will continue to provide any assistance necessary to satisfy the Agencies.

Section M - Compliance Schedule

Response I.M.1.

- a. The program of upgrading the tank and container storage units' secondary containment system will be completed by Detrex Corporation. Any identified cracks or gaps in the concrete will be repaired, the floor subsequently cleaned and prepared for the application of the selected sealant in accordance with the manufacturers specifications. As discussed previously with the WMD, A similar sealant program was completed in June 1991 in the Detrex TSD facility located in Indianapolis, Indiana. Detrex understands that the request for a six month period to evaluate the performance of the Indianapolis sealant prior to initiating a similar application in the Eaton Avenue facility is acceptable to the WMD.
- b. Plans for the upgrading of the loading/unloading area have been provided to the WMD. This program will be completed after receipt of analytical results of the Background Soil and Groundwater Data Collection Program and subsequent review by the WMD.
- c. A suitable leak detection system was proposed by Detrex Corporation and subsequently approved by the WMD. This program has now been completed.

CONESTOGA-ROVERS & ASSOCIATES LIMITED

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2 (519) 884-0510

Consulting Engineers

July 31, 1991

Reference No. 2471

Nadine Romero
Geologist
Hazardous Waste Division
Michigan Department of Natural Resources
Ottawa Street Building
South Tower
P.O. Box 300028
Lansing, Michigan
48909

Dear Nadine:

Re: Detrex Facility - Detroit, MI

As per our telephone conversation on Friday July 26, 1991, the following information is presented to address two of the MDNR technical review comments regarding Section E - Environmental Monitoring Program. In particular these concerns are:

Comment E.2

Detrex must explain why a perched water table is not observed at the facility.

Comment E.3

As outlined in the March 26, 1991, Notice of Deficiency, it is not clear where the grain size analyses are for the CL designations on the boring logs. Detrex must address this item.

Response to Comment E.2

During the drilling of MW-1, BH-2 and BH-3, perched groundwater was not encountered in the upper 3 to 5 feet of fill which overlies the clay sediment, or within the clay sediment as a saturated sand lense. Explanations for not encountering perched groundwater are:

1. Boreholes are located in an urban environmental which receives reduced infiltration. For instance, BH-3 was drilled in a concrete paved area.

July 31, 1991

-2-

Reference No. 2471

2. The process of evapotransporation affects moisture buildup in the upper fill unit. Since this shallow unit is in close communication with the atmosphere moisture buildup towards saturation is unlikely.

Response to Comment E.3

Geologic classification in the field was done according to the Unified Soil Classification System (USCS). Soil samples were submitted to McDowell and Associates for grain size distribution which classified the soil differently than CRA. However upon further review of the grain size curves it appears that McDowell incorrectly interpreted the grain size curves for BH-2P (35 ft. bgs) and BH3-9 (35ft. bgs) as silty sand (SM).

Using ASTM D 2487 soil classification criteria these soil samples should be reinterpreted as a lean clay (CL) based on the following criteria:

- 50% or more passes the No. 200 sieve
- Liquid limit (LL) is less than 50
- Plasticity Index (PI) is greater than 7 and plots on or above the "A" line.

Although the Atterburg Limits were not performed on these specific samples, Atterberg Limit tests performed on similar samples (see Tables 3.2 of Hydrogeologic Report) all exhibit a LL less than 50 and a PI greater than 7. Therefore, it is reasonable to assume these same limits apply to the grain size samples.

The grain size curves will be revised showing their proper classification.

Should you have any questions, please do not hesitate to contact us.

Yours truly

CONESTOGA-ROVERS & ASSOCIATES

Brian Sandberg

BS/cdd

c.c. Issa Shamiyeh

Bill Moore

Bruce McConnell



NATURAL RESOURCES COMMISSION MARLENE J. FLUHARTY

MARLENE J. FLUHARTY GORDON E. GUYER O STEWART MYERS - AAYMOND POUPORE

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING PO BOX 30028 LANSING, MI 48909

DELBERT RECTOR, Director

August 6, 1991

Mr. Bill Moore Corporate Engineering & Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Moore:

SUBJECT: Act 64 Operating License Application
Detrex Corporation, MID 091 605 972

This letter is in follow-up to our telephone conversation of August 5, 1991. As stated during our conversation, the Waste Management Division (WMD) was contacted by Mr. Tom Shoens, Air Toxics Coordinator, Wayne County Department of Public Health, Air Pollution Control Division (WCAPCD), regarding Detrex Corporation's (Detrex) Act 64 operating license application. Mr. Shoens informed WMD staff that the comments regarding the application that were prepared by WCAPCD and telefaxed to the WMD on July 31, 1991, did not address ambient air monitoring requirements. As suggested by Mr. Shoens, it is recommended that Detrex contact him directly to discuss the potential ambient air monitoring requirements for Detrex's Detroit, Michigan facility. Mr. Shoens may be contacted at 313-832-5001.

Please be advised that Detrex must address any ambient air monitoring requirements deemed applicable to the facility by WCAPCD in its response to the WMD's August 2, 1991, application Notice of Deficiency. Detrex's response and the application revisions are due September 3, 1991.

If you have any questions, please contact me.

Sincerely,

Ronda L. Hall

Environmental Engineer
Waste Management Division
517-373-9548

Ronda S. Hall

cc: Mr. Ronald C. Hritzkowin, Detrex

Mr. Tom Shoens, WCAPCD

Mr. Steve Drielick, WCAPCD Ms. Lorraine Kosik, U.S. EPA Mr. Richard Traub, U.S. EPA

Mr. Steve Buda, DNR

Mr. Donald Mbamah, DNR-Livonia

Operating License File



NATURAL RESOURCES COMMISSION
MARLENE J FLUHARTY
GORDON E GUYER
STEWART MYERS
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JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING P O. BOX 30028 LANSING, MI 48909

DELBERT RECTOR, Director

August 2, 1991

CERTIFIED MAIL

Mr. Bill Moore Corporate Engineering & Risk Management Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111

Dear Mr. Moore:

SUBJECT: Notice of Deficiency/Letter of Warning

Act 64 Operating License Application Detrex Corporation, MID 091 605 972

The Waste Management Division has completed a technical review of the revised hazardous waste container and tank storage Act 64 operating license application submitted on June 26, 1991, including subsequent revisions that were submitted.

A list of the revised application deficiencies is enclosed. The revisions correcting the deficiencies must be submitted to the Chief of the Waste Management by September 3, 1991, with the exception of the work plan referenced in Deficiency E.1.b, which must be submitted within two weeks of receipt of this letter. Failure to submit a technically adequate operating license application is grounds for denial of the application pursuant to R 299.9518(2)(c) and for termination of interim status pursuant to 40 CFR §270.10(e)(5).

When submitting revisions, please use a replacement page format. The revised pages should be three-hole punched and numbered correctly so that they can be placed directly into existing binders. Eight copies of the revisions must be submitted.

If you have any questions, please contact me.

Sincerely, Rondo S. Hall

Ronda L. Hall

Environmental Engineer Waste Management Division

517-373-9548

Enclosure

cc/enc: Mr. Ronald C. Hritzkowin, Detrex Corporation

Ms. Lorraine Kosik, U.S. EPA Mr. Richard Traub, U.S. EPA

Mr. Steve Buda, DNR Ms. Nadine Romero, DNR

Mr. Donald Mbamah, DNR-Livonia

Operating License File

NOTICE OF DEFICIENCY

Act 64 Operating License Application
Technical Review II

Detrex Corporation 12886 Eaton Avenue Detroit, Michigan 48227

MID 091 605 972

August 2, 1991

The Michigan Department of Natural Resources, Waste Management Division (WMD), has completed a technical review of the revised Act 64 operating license application submitted by Detrex Corporation (Detrex) on June 26, 1991. A list of the application deficiencies is provided below.

I. <u>Section Specific Deficiencies</u>

A. Section A - Act 64 Operating Licence Application, R 299.9508(1)(a)

- 1. The reference to the transfer facility on page A-4 of the application must be deleted. As written, the application suggests that the transfer facility is a hazardous waste treatment, storage, or disposal facility, which it is not.
- 2. The facility contact's title noted on the application form must be revised to reflect the fact that he is the Corporate Manager of Environmental Compliance, RCRA Section, not "Recra" section.
- 3. The city noted under the facility mailing address of the application form must be checked. It should be Southfield not Detroit.
- 4. The list of air pollution permits provided in Section A must be revised to include reference to APC 5-02469 and the installation permit for process equipment item number 24 which are included in Attachment A-4.
- 5. Form 3, Section IV of the application form must be revised to include the process code for tank storage, S02, in order to show that all of the

wastes accepted at the facility are stored in tanks in addition to containers.

- 6. Several discrepancies were noted between the information provided in the list of process equipment and information provided in other portions of the application.
 - a. The information regarding the capacity of tank number 4 under the equipment name heading and description heading are in conflict. The former indicates that the tank has a capacity of 10,000 gallons while the later indicates that the tank has a capacity of 16,000 gallons.
 - b. The information under the equipment name heading of the process equipment list and other portions of the application indicate that tank number 12 has a capacity of 2,300 gallons while Attachment B-8 indicates that the tank has a capacity of 2,500 gallons.
 - c. The reference to "temporary storage" of still bottoms in tank number 17 under the description heading of the process equipment list must be replaced with a reference to "accumulation" of still bottoms. When referring to hazardous wastes generated on-site, "storage" implies that the waste is maintained on-site for greater than 90 days.
 - d. Many discrepancies were noted between the capacities noted in the list of process equipment and in the air pollution permits contained in Attachment A-4.
 - e. The primary Standard Industrial Classification (SIC) Code noted on the facility's wastewater discharge permit, 5161, must be noted in Form 1, Section VII of the application form.

B. <u>Section B - Facility Description</u>, R 299.9508(1)(b), 40 CFR §§270.14(b)(1), (10), (11), and (19)

- Section B-1 must also address the SIC code, 5161, noted in the facility's wastewater discharge permit.
- 2. Attachments B-2 (especially Section A-A), B-7, and B-8, and other figures in the application as

appropriate, must be revised to reflect the design of the upgraded containment system for the unloading/loading area.

3. Attachment B-9 must be revised to include the product blending tank that is located along the eastern wall of the facility.

C. <u>Section C - Waste Characteristics</u>, R 299.9508(1)(b), 40 CFR §§270.14 (b)(2) and (3)

- 1. As explained in Deficiency A.6.c, the term "storage" on page C-4 must be replaced with the term "accumulation."
- 2. Section C-1a must be modified to indicate that, in addition to annually, the waste streams will be re-characterized when Detrex is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and when the results of waste shipment inspections indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest.
- 3. Section C1-b must address bulk shipments of hazardous waste received at the facility.
- 4. Section C1-b must be revised to state that a composite sample of up to a maximum of 10 drums per waste code per individual generator will be collected for analytical testing (with the exception of ignitability testing) prior to signing the manifest.
- 5. Composite sampling is not allowed for ignitability testing. The waste analysis plan must be revised to state that each container of waste or bulk shipment of waste received at the facility will be analyzed for ignitability.
- 6. Waste screening must include compatibility testing of both containerized waste and bulk shipments. This is necessary to ensure that the waste that will be charged to the storage tanks and recycle system is compatible with the material already in the tanks. Samples for compatibility testing may be composited on a per waste code per individual generator basis consistent with Section C1-b and Deficiency C.4.

- 7. The waste analysis plan suggests that in the event that a waste stream is determined to be unacceptable at the facility, the manifest will not be signed, and the waste either returned to the original generator, or the manifest corrected by the generator and the wastes transferred to the on-site transfer facility or transported off site to a permitted facility (see pages C-6, C-11, and C-12). Detrex is hereby informed that the movement of rejected wastes into the transfer facility is not acceptable. Transfer facility operations are not meant to augment treatment, storage, or disposal facility operations. They are two entirely separate operations. Therefore, wastes deemed unacceptable must either be returned to the original generator, or the manifest and land disposal restriction certificate corrected as appropriate and the waste transported off site to a properly permitted facility. The appropriate portions of the waste analysis plan and application must be revised to reflect this.
- 8. The waste analysis plan, specifically Section C-3a and Table C-2, must be revised to such that they clearly distinguish between the waste characterization parameters and rationale, and the waste screening parameters and rationale. The waste analysis plan must include separate tables for the waste characterization parameters and rationale, and the waste screening parameters and rationale. The tables must be clearly labeled.

Additionally, the stabilizer compounds, "other compounds," and non-volatile residue parameters referenced in Table C-2, must be addressed in the text of the plan (i.e., Section C-3a).

- 9. The third paragraph of Section C-3a references Section C-2d which does not exist.
- 10. Section C-3b, second paragraph, must be revised to clearly explain how wastes determined to be ignitable will be handled given Deficiency C.7.
- 11. Section C-3b fails to address bulk shipments of waste.
- 12. Information regarding the test methods used to evaluate the stabilizer compounds, "other

compounds," and non-volatile residue, must be included in the waste analysis plan. References for the methods by which all parameters (characterization and screening) will be analyzed must be provided in Section C-3b. Detrex may wish to develop a table to summarize this information.

- 13. Section C-3d must be revised to be consistent with Sections C-1b and C-3a, and Table C-2.
- 14. Attachment C-1 must include information regarding the organic constituents of the toxicity characteristic leaching procedure (TCLP) wastes which may be accepted at the facility.

In addition, Attachment C-1 must indicate that the metal constituents of the TCLP wastes which may be accepted at the facility will be analyzed by the TCLP method (not applicable to copper and zinc) and that if the wastes pass the TCLP test, they will then be analyzed using the extraction procedure (EP) toxicity method (also applicable to copper and Failure of either of the referenced analytical tests would result in the wastes being characteristically hazardous. This is necessary since the State of Michigan is not yet authorized for the TCLP provisions of the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act, thus dual analyses is required until Michigan is authorized for these provisions. Detrex may wish to include a statement in the waste analysis plan indicating that it will continue to perform both TCLP analyses and EP toxicity analyses until such time that the State of Michigan becomes authorized for the TCLP provisions, at which time it will cease conducting EP toxicity analyses and conduct only TCLP analyses.

- 15. Section C-3f may be deleted from the text.
- 16. The discussion in Section 8.2.1, Attachment C-3, regarding the frequency that the matrix spike samples are analyzed needs clarification. It is assumed that the spikes are analyzed once per week. Attachment C-3 must be revised accordingly.
- 17. Attachment C-4 must be revised to include information regarding the results of compatibility testing.

- 18. Section 3.2 of Attachment C-6 must be revised to reflect the fact that only samples from the same generator and of the same waste code may be composited.
- D. Section D Process Information, R 299.9508(1)(b), R 299.9504(1)(α), R 299.9504(2), and R 299.9504(3)
 - 1. Item a, Section D-la(4), suggests that material removed from the secondary containment systems at the facility will be placed in "open top steel drums" and transported off site for treatment/disposal at permitted facilities. must explain how the collected material will be analyzed, characterized, and subsequently managed. Additionally, Detrex must desribe where and how the collected material will be stored prior to treatment/disposal.
 - 2. Current, accurate engineering plans of all process equipment and secondary containment structures at the facility must be included in the application. Review of the information provided in Attachment D-2 indicates that the drawings provided are still deficient as outlined below.
 - a. The plan of survey provided by Warner, Cantrell & Padmos, Inc. must be revised to reflect the upgraded design of the unloading/loading area secondary containment system. Cross-section A-A must be revised.

Additionally, engineering plans of the upgraded unloading/loading area must be included in the application. The plans must provide sufficient views, elevations, sections, and layouts. They must include specifications on all construction materials and installation methods.

The plan of survey and the engineering plan(s) of the upgraded unloading/loading area must be sealed by a registered professional engineer (P.E.) in accordance with R 299.9504(1)(g).

b. A second engineering drawing, "New Gold Shield Reclamation Addition" (1966), of the facility was provided in the revised application. However, this drawing is not sealed by a registered professional engineer. As provided in the original application, the revised

application must either contain a sealed drawing or a sealed statement from a registered professional engineer certifying that this engineering drawing has been reviewed and represents the existing conditions at the facility.

c. A third engineering drawing, "Flammable Liquids Loading Dock", was provided in the revised application. This drawing implies that the liquid collected in the sump in the transfer facility is pumped onto the gravel yard with a Weldon diaphram air pump. This is not consistent with previous statements in the application indicating that the liquid is pumped via piping to the drain in the boiler room and discharged according to the facility's wastewater discharge permit. Detrex must revise this drawing and address the management of the collected liquid issue. Detrex cannot discharge the collected liquid to the gravel yard.

Additionally, this print is not sealed by a registered professional engineer as required.

- 3. Attachment D-2 and the appropriate text in Section D must be revised to reflect the fact that the drums are stacked using wooden pallets.
- 4. The process flow diagram contained in Attachment D-5 must be revised to include pump location and valve location information as contained in the original process flow diagram.

In addition, the diagram must distinguish between stored hazardous waste lines, generated hazardous waste lines, and product lines.

Lastly, it was noted that the still bottoms accumulation tank (number 17) had a F002 waste classification label. Detrex is hereby informed the still bottoms must be analyzed for all of the the F001, F002, and D-series TCLP waste constituents accepted into the facility, and the manifests and land disposal restriction certificates filled out. The manifest may list the primary waste code, with the secondary waste codes noted in section J of the manifest. The

certificates must include all applicable waste codes.

- 5. Based upon a review of the discussion regarding the storage tank section, in conjunction with the engineering plans and tank assessment, the WMD has identified several deficiencies which are outlined below.
 - a. As a result of the tank assessment conducted in January 1990, it was determined that the tank base supports for the "F001 and F001/F002 vertical tanks" do not provide adequate support for the tanks' base plates. It was also determined that the saddle spacing and angle of contact for the "F002 horizontal tank" did not meet tank industry standards. Based on these determinations, the firm conducting these assessments would not certify the tanks until these concerns were properly addressed and checked in the field. The May 11, 1990, letter to Detrex from Randers Engineering, Inc., indicates that the concerns were addressed and that the tanks were now certified for use. Detrex must specifically explain how these concerns were addressed and describe the tank system modifications. Adequate information was not provided in the application or tank assessment document to evaluate the compliance status of the subject tanks.
 - b. Pursuant to 40 CFR §264.191(b)(2), tank assessments must address the hazardous characteristics of the wastes that have and will be handled. The document provided fails to address methylene chloride, a major constituent of the waste handled according to Section C of the application, and the TCLP waste constituents. Detrex's response that the next annual tank assessment will incorporate the hazardous characteristics of the wastes stored at the facility is not acceptable. This must be done and the information provided in the application.
 - c. Section D-2a of the application must be revised to include information regarding the dimensions of the tanks.

- d. The tank engineering drawings contained in Attachment D-6 of the application are inadequate.
 - 1. The drawings must be approved and sealed by a registered professional engineer.
 - 2. The text of the application suggests that the nominal capacity of tank number 22 is 4,000 gallons, whereas the drawing for the same tank suggests that the nominal capacity is 4,500 gallons. This discrepancy must be addressed.
 - 3. The drawings must be revised as appropriate to reflect the existing tank systems (see Deficiency 5.a above). The current drawings suggests that the tanks are supported by channel box base structures. This design was deemed inadequate in the January 1990 tanks assessment document.
 - 4. The January 1991 tank assessment information provided in the application states that before a conclusion can be drawn on tank number 22, the interior must be inspected and the bottom head thickness ascertained. Information contained in Attachment Number 4 of the tank assessment document suggests that the head thickness issue has been resolved, however, information regarding the inspection of the interior of the tank is not presented.
 - 5. The application must include a certification statement from an independent, registered professional engineer that specifically addresses the integrity of the tanks given their intended use, and cracks, leaks, corrosions, and erosion. In accordance with 40 CFR §264.191(5)(ii), it must be supplemented by the language contained in 40 CFR §270.11(d). This is not an item that can be delayed until the next annual tanks assessment.
 - 6. The engineering drawing provided for tank number 12 shows a coil system inside of the tank. Detrex must fully describe the coils, and their use and relevance to the recycle operation.

- 7. As outlined in 40 CFR §264.193, the secondary containment system must be provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system, and sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. The application must address the tanks' containment system with respect to these leak detection and control requirements. Any modifications to the tanks system must be outlined in the compliance schedule work plan referenced in Deficiency M.1. Detrex is advised that tanks placed directly on concrete bases do not provide for leak detection.
- 8. Section D-2d of the application outlines how Detrex proposes to ensure that the two storage tanks are operated in accordance with the respective approved process design capacities. The engineering drawings provided for the two tanks suggests that sight glass connections already exist. However, it does not appear that any exist at elevations that would allow Detrex to adequately monitor the level of waste in the respective tanks to ensure that the approved process design capacities are not exceeded. Detrex must provide an explanation of where the sight glasses will be located and provide a detailed drawing of the sight glass/tank design. Detrex may wish to consider an alternate method of ensuring that the process design capacities are not exceeded, such as a level sensor with an alarm.

E. Section E - Environmental Monitoring Program, R 299.9508(1)(b), R 299.9611

 The application contains requests for waivers of the groundwater and annual soil monitoring requirements under the provisions of R 299.9611(3) and (4), respectively. Based on a review of the hydrogeological report, the waiver requests, and the other information provided in Section E, it appears that the groundwater and annual soil monitoring requirements may be waived if Detrex submits the following:

- a. Information requested in Deficiency D.1.a, and the unloading/loading area is secondarily contained in accordance with a design approved by the WMD; and
- b. Background analytical data on the existing quality of the groundwater and soil at the facility. This will require Detrex to sample the groundwater monitoring well located east of the building and the soil in the vicinity of the unloading/loading area. The samples must be analyzed for all of the constituents contained in the hazardous wastes that are received at the facility. A minimum of four samples of each soil type must sampled and analyzed (e.g., the top six inches of the native sand, and the sand and clay at the interface of the sand and clay units). Detrex must specify the methods by which the groundwater and soil samples will be collected and analyzed, including specific method references and method detection limits, in a work plan. The work plan must be submitted to the WMD for review and approval within two weeks of receipt of this Notice of Deficiency.
- 2. Detrex must explain why a perched water table is not observed at the facility.
- 3. As outlined in the March 26, 1991, Notice of Deficiency, it is not clear where the grain size analyses are for the CL designations on the boring logs. Additionally, Detrex must provide more detail on the boring logs with regard to the lithologic descriptions on the boring logs.
- F. Section F Procedures to Prevent Hazards, R 299.9508(1)(b), 40 CFR §§270.14(b)(4), (5), (6), (8), and (9)
 - 1. The last sentence of the first paragraph, Section F-2a, is not a complete sentence and should be revised.
 - 2. The inspection schedules provided in Attachment F-3 must be revised such that it is clear that the

date that the remedial action was completed is noted on the form rather than just a "yes" or "no" notation.

- 3. The time the inspection is conducted must be noted on the daily inspection form.
- 4. The main electric disconnect (MED) is noted in the legend on Attachment F-4 but is not noted on the figure itself.
- 5. Detrex will be required to inspect the cargo portion of all hazardous waste vehicles before the vehicles leave the facility to ensure that all waste has been removed, and maintain a record of these inspections for a period of six months. an inspection reveals waste remaining in the vehicle, Detrex must take all steps necessary to assure that the waste is removed from the vehicle prior to leaving the facility. This is not applicable to vehicles transporting waste that has been rejected or manifested to another hazardous waste management facility. Detrex must include a description of the procedures it will use to accomplish this and modify the inspection portion of the application accordingly. Additionally, inspection forms for these procedures must be provided in the application.

G. Section G - Contingency Plan, R 299.9508(1)(b), 40 CFR §270.14(b)(7)

- 1. As explained in Deficiency A.6.c., the word "stored" in the third paragraph, Section G-1, must be changed to "accumulated."
- 2. The specific waste codes (and the respective waste constituents) that the facility handles must be noted in the contingency plan. Simply stating that the facility handles F001 and F002, and the "D-series compounds" is not acceptable.
- 3. Item B.2, page G-9, must be modified. However remote the possibility, spills from containers, tanks, and tanker trucks that could result in a release to the soil and/or groundwater must be identified as an event that would trigger the implementation of the contingency plan.

- 4. Item 11.c, page G-14, must be revised to provide an explanation of how the excavated soil will be managed. Additionally, Detrex must explain how it will determine if all contaminated soil has been properly remediated.
- 5. The list of emergency equipment provided in Section G-5 must be revised to contain a more detailed description of the equipment and its capabilities (e.g., type of fire extinguishers, type of absorbent material, type of respirators and available canisters, type of self-contained breathing apparatus, etc.).
- 6. All emergency equipment must be located on the Attachment G-2. The MED must be noted on Attachment G-3. Additionally, the locations of the fire hydrants and personal protection equipment (specifically goggles, gloves, and boots) must be clearly noted on the diagram.
- 7. Copies of the revised contingency plan must be supplied to the appropriate authorities. Once it is determined that the contingency plan satisfies the applicable requirements, Detrex must supply copies of the coordination agreements to the WMD.

H. Section H - Personnel Training, R 299.9508(1)(b), 40 CFR §270.14(b)(12)

- 1. Several references to the emergency coordinator and branch manager were noted in Section H and the attachments to this section. These references should be changed to the facilities manager since this is consistent with the job description provided in Attachment H-1.
- 2. The facilities manager job description must identify the requisite skills, education, and other qualifications for the position. Separate headings for the job responsibilities/duties, and the items noted above must be included in the job description.
- 3. Several items were noted in the quality control coordinator job description that need to be addressed.

- a. The reference to the Facility Part B Application in the first paragraph of the quality control coordinator job description must be deleted.
- b. Items 1(c) and 2(c) must clarify the specific wastes that are authorized to be handled in the transfer facility operation.
- c. The job description must identify the requisite skills, education, and other qualifications required for this position.
- 4. The Gold Shield operator #1 job description must identify the requisite skills, education, and other qualifications required for this position. Additionally, it is recommended that Detrex review the organization of this job description in an effort to clearly distinguish between responsibilities, duties, requisite skills, qualifications, etc.
- 5. The Gold Shield operator #1 job description makes reference to the receipt of corrosive wastes at the facility. Detrex must explain this reference.

I. Section I - Closure and Post-Closure Plan, R 299.9508(1)(b) and (e), 40 CFR §270.14(13)-(18)

- The word "stored" in the second paragraph, page I-4, must be changed to "accumulated."
- 2. The reference to the post-closure plan in the fifth paragraph, page I-4, must be deleted.
- 3. The items to be included in the closure certification must be listed in the closure plan. Detrex cannot reference the guidance document.
- 4. Section I-1d(1) must be revised to explain how the sweepings and wash water generated from the cleaning of the secondary containment system would be analyzed, characterized, and subsequently managed.
- 5. Detrex must clarify the parameters for which the wastewater generated from the decontamination of the secondary containment area, tanks, and unloading/loading area will be analyzed. The method of analysis and the method detection limit must also be specified.

- 6. The closure plan must address sampling of the soil under the unloading/loading area at the time of closure. The closure plan must state that the soil underneath the area will be sampled if any significant cracks or staining are observed, and under the sump. The closure plan must outline how the soil samples will be collected and analyzed, and the criteria for determining if remediation of the soil is necessary.
- 7. The time frame specified in Section I-1e must be changed to 45 days in accordance with 40 CFR §264.112(d).
- 8. Sections I-2, I-6, and I-7 should be deleted.
- 9. The reference to treatment in Section I-3 must be deleted.

J. Section K - Manifesting, Recordkeeping, and Reporting, R 299.9608, R 299.9609, and R 299.9610

- 1. Detrex must clarify that if it is not the transporter, it will immediately give the transporter at least one copy of the signed manifest.
- 2. The first paragraph, Section K-2, must be revised to state that all of the applicable information outlined in R 299.9609(1) will be maintained in the operating record until closure of the facility.
- 3. Item 1, Section K-2, must state that description and quantity information will include cross-references to specific manifest document numbers and dates of receipt.
- 4. Item K-4, Section K-2, must be revised to state that the records for all former employees will be maintained for not less than three years, and that records for all current employees will be maintained until closure of the facility.
- 5. Section K-2 must be revised to state that any monitoring, testing, or analytical data required by the operating license, and the notices to the generators referenced in 40 CFR §264.12(b), will be maintained in the operating record until closure of the facility.

6. Section K-3b must to revised to provide a list of the items to be included in the biennial report rather just reference form 8700-13B.

K. Section M - Certification of Capability, R 299.9508(1)(d)

1. The certification of capability statement must be sealed by the registered professional engineer.

L. Environmental Permits - R 299.9508(1)(b)

1. Review comments received from the Wayne County Department of Public Health (WCDPH), Air Pollution Control Division, indicate that several facility air permit applications are pending. These include applications for the Dyna-500 still, two replacement storage tanks, a replacement mixing/storage tank (specific reference numbers for the tanks were not provided by WCDPH), and the carbon adsorption system. Copies of these air permits as well as any air permits issued to the facility that were not already submitted with the Act 64 operating license application must be submitted to the WMD.

M. Compliance Schedule - R 299.9508(1)(g)

- 1. Several items at the facility have been identified as needing modification. These items include:
 - a. Upgrading the tank and container storage units' secondary containment system. This includes repairing expansion joints and cracks (as discussed in Section E), and sealing the entire secondary containment system with a chemically and abrasion resistant coating.
 - b. Upgrading the unloading/loading area, which includes providing the appropriate curbing and other controls to ensure that the area has sufficient containment volume and controls to protect against releases to the environment, and providing the area with a chemically and abrasion resistant coating.
 - c. Modifying the hazardous waste storage tanks' design to provide for adequate leak detection.

The WMD recognizes that some of the work on the upgrading of the unloading/loading area has been completed. As previously discussed, Detrex must submit engineering drawings of the upgraded unloading/loading area design. Detrex must also submit a work plan outlining how it intends to address the remaining items to demonstrate compliance with the applicable rules. The plan must specify the necessary modifications to any procedure, equipment, process, or portion of the facility, together with the expected dates of completion. Detrex must address how the waste will be handled when the modifications are being completed. In preparing the plan, Detrex must clearly distinguish between existing conditions at the facility and proposed modifications.



CONESTOGA-ROVERS & ASSOCIATES LIMITED

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2 (519) 884-0510

June 24, 1991

Reference No. 2471

Ms. Rhonda L. Hall
Environmental Engineer
Hazardous Waste Permits Section
Waste Management Division
Michigan Department of Natural Resources
Ottawa Building South
608 West Allegan
Lansing, Michigan
48909

RECEIVED

JUN 26 1991

Dear Rhonda:

Waste Management Division

Re: Detrex Corporation -Solvent and Environmental Services Division

Eaton Avenue, Detroit, Michigan

MID 091 605 972

Response to Notice of Deficiencies

In response to the Michigan Department of Natural Resources Waste Management Division (MDNR-WMD) Notice of Deficiency (NOD) for the above referenced facility, please find enclosed ten (10) copies of a revised Act 64 Operating Licence Application. The Application is provided with an individual response summary that addresses each specific WMD comment.

The new Sample Laboratory Reports are not yet finalized for inclusion into Section C of the Application. Detrex's Quality Control Officer at the Eaton Avenue facility is finalizing the final form of the Laboratory Report now that the lab equipment has been set up at the facility. It is anticipated that the Laboratory Report will be be completed in time to be forwarded to your attention next week. We regret any inconvienence this may cause you.

The request under Rule 215 of ACT 64 for the approval of alternate analytical methods will be submitted at the same time as the Laboaratory Report form. This was requested by yourself during the June 7 meeting held in Lansing.

In addition, Detrex will continue to attempt to locate further engineering drawings for the Easton Avenue building and the re-designated hazardous waste storage tanks. A letter from the engineer that certified the assessment of the hazardous waste storage tanks, detailing the repairs completed on the tank support system has been requested.



June 24, 1991

-2-

Reference No. 2471

Detrex and CRA appreciate the assistance you have provided as we have been addressing the WMD's comments. The meeting in your office on June 7, 1991 was especially helpful in completing the Application.

Should you have any questions or require further information, do not hesitate to contact Mr. Bill Moore (Detrex 313-358-5800) or the undersigned at your convenience.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Buc It Could

Bruce McConnell P.Eng.

BMC/cdd/5

Encl.

c.c. William M. Moore Jr., Detrex

Issa Shamiyeh, Detrex

Ronald Hritzkowin, Detrex

General Application Deficiencies

Response I.A.

The entire Application has been reviewed and updated as necessary to reflect current operations and personnel. Several changes have taken place since the original application was submitted in August 1988.

Response I.B.

Detrex Corporation accepts WMD's determination that existing facility process design capcity totals 13,750 gallons. Detrex does not not agree with WMD's classification of the 4,000 gallon and 2,300 gallon process feed tanks as hazardous waste storage tanks. However, in order to continue to operate the facility under these conditions, Detrex proposes to proportion the process design capacity to 8,250 gallons of container capacity (process code S01) and 5,500 gallons of tank capacity (process code S02).

In order to meet the 5,500 gallon tank storage capacity, measures will be taken to operate the existing 4,000 gallon capacity tank as a 3,600 gallon tank and the existing 2,300 gallon tank as a 1,900 gallon tank. Operating procedures that will be followed to ensure the maximum tank capacity for either tank is not exceeded are described elsewhere in this response.

The entire Act 64 Operating License Application has been revised to address both container and tank storage capacity. As a result of these major changes, the Application will be re-submitted in its entirety.

A. Section A - Act 64 Operating License Application

Response II.A.1

!^

The rule citation has been corrected.

Response II.A.2

The application form has been corrected to reflect the registered name of the facility (ie. Detrex Corporation, Solvents and Environmental Services Division).

Response II.A.3

The contact information on the application form has been updated to reflect current personnel. The form lists Mr. Bill Moore as facility contact, however, Detrex requests that Mr. Ron Hritzkowin, the Facility Manager, be copied on any correspondence..

Response II.A.4

The appropriate permits have been added to Section X of the application form. Also included is the facilities Detroit Water and Sewerage Industrial Wastewater Discharge Permit. Correspondence relating to additional air permits from Wayne County is also included.

Response II.A.5

See Response I.B.

Response II.A.6

The T04 process design capacity has been removed from the operating license application form.

Response II.A7

The application form has been updated to reflect the Toxicity Characteristic Leaching Procedure (TCLP) wastes included in the October 16, 1990 revised Part A Permit Application.

Response II.A.8

The process codes on Section IV of the application form have been revised to reflect both container (S01) and tank (S02) storage process codes.

Response II.A.9

The facility was re-surveyed in April, 1991 and all facility plans within the application have been updated to reflect existing operations.

Response II.A.10

A new set of photographs with appropriate captions has been included to replace the existing photographs. The photographs reflect existing conditions including the transfer facility.

Response II.A.11

Updated copies of all appropriate permits have been provided.

Response II.A.12

Both of the feed tanks are for either F001 or F002 material which is being recycled. This clarification has been corrected throughout the permit. The still bottoms remaining after processing are transferred to the F002 generator accumulation tank.

Response II.A.13

The facility has been unable to loacte the air permit for the Dyna-500 (DCI) distillation unit. Inquiries to Wayne County Department of Health are presently being persued to confirm the permitted status of the unit and obtain a copy of the permit. In the event this is unsuccessful, a new permit application will be made.

B. Section B - Facility Description

Response II.B.1

The facility description and other appropriate sections of the application have been revised to reflect existing conditions and the proposed modifications.

Response II.B.2

The principal contact person is Mr. Bill Moore. As indicated in Response II.A.3., Detrex requests that Mr. Ron Hritzkowin be copied on all correspondence.

Response II.B.3

The discussion of the catch basin that is present within the containment area of the transfer facility has been clarified. A sump is also present in the loading/unloading area. Rainwater collected is not discharged before being sampling and subsequently discharged to a Publically Owned Treatment Works (POTW) under a discharge permit if analysis meets the requirements of the discharge permit. In the event that criteria for direct discharge is not met, the liquid would be collected and containerized (ie. drums or bulk tanker depending on quantity), and disposed off-site at a permitted facility. The discharge point to the POTW is in the boiler room. Liquid tranfer is accomplished through process piping and a transfer pump.

Response II.B.4

Section B-4 and Attachment B-8 have been revised. A more complete description of vehicular traffic relating to the Detrex facility is provided. Additionally, the unloading operation for bulk shipments of wastes are described.

C. Section C - Waste Characteristics

Response II.C.1

See Response I.B.

Response II.C.2.

With the recent adoption of the TCLP toxicity classification, Detrex selected to dually classify the waste as possibly containing the D-series compounds in addition to the F001 and F002 waste classification. The addition of the D-series compounds is based on Detrex's knowledge of the waste generation process and not on specific analytical waste characterization. The presence or absence of the specific TCLP compounds in the F001/F002 waste stream does not effect the solvent recovery process. Thus, Detrex handles the wastes as if the D-series compounds are present and provides appropriate notification regarding Land Ban restrictions for the F002 still bottoms remaining after distillation.

Table C-1 has been updated to include the appropriate TCLP waste codes (ie. D-series compounds).

Response II.C.3.

Detrex has removed all references to the T04 process code from the Operating License Application.

Response II.C.4

A copy of the entire Operting License Application, including the waste analysis plan is maintained at the facility at all times.

Response II.C.5.

The facility description has been updated throughout the Application to reflect current operations.

Response II.C.6.

The only wastes that Detrex accepts under present status is the F001 and F002 wastes which may include any of the TCLP D-series compounds as identified

on Table C-1. Detrex is not proposing to accept any additional wastes under the Act 64 Operating License Application.

Detrex does operate a Transfer Facility, by definition, at the Eaton Avenue location, however it is located outside of the building and operates independently of the solvent recovery operation.

If an incoming waste is properly characterized as a F001 or F002 waste stream, with the inclusion of the D-series compounds, it should be acceptable to the process stream. The solvent content of the waste, as determined by the specific gravity method, provides an estimate of the recoverable solvent yield from the waste stream. All acceptable wastes could be processed, however, wastes with very low solvent content may not be economical to process. These wastes may be re-manifested by Detrex and transported off site to a permitted facility.

Thus, as long as a waste is properly characterized, the waste is physically acceptable to the process unit. There are no particular tolerance limits for acceptable versus unacceptable F001 or F002 wastes.

Response II.C.7.

Detrex does employ two types of waste analysis. The entire Waste Analysis Plan, including the Quality Assurance Project Plan, has been updated to reflect current waste characterization procedures. An overview describing the two types of waste analysis has been added to Section C.

A thorough review of waste compatability has recently been conducted in accordance with the document "A Method of Determining the Compatability of Hazardous Wastes, EPA-600/2-80-076, April 1980". Based on the review and general knowledge of these wastes which have been manged by Detrex for over 20 years, Detrex and CRA believe potential waste incompatability is not a concern and thus propose no further on-going waste compatability testing. A waste compatability review will be conducted for any new wastes accepted which may contain parameters not included in this original compatability assessment.

Detrex proposes to conduct an ignitability test (ASTM Method D4982-89) on a composite sample collected from each shipment of wates received from each individual customer. In the event a positive result is observed, the drum will not be accepted and the manifest not signed. The original generator would be contacted and either: the manifest corrected and the drum(s) placed

in the Transfer Facility; the drum(s) returned to the original generator; or the drum(s) would be transported to a facility permitted to accept the waste. The waste may be further tested utilizing ASTM D93 (Test Method for Flash Point by Pensky-Martens Closed Test) to confirm a flash point below 140°f.

Response II.C.8.

The overall organization of the Waste Analysis Plan has been revised somewhat. However, the Waste Analysis Plan, by definition also includes in particular the Quality Assurance Project Plan (QAPP). The QAPP reflects the analytical procedures which may be conducted at an off-site laboratory while the procedures followed by facility personnel are incorporated within the text of Section C. With the recent reorganization of Detex's laboratory formerly located in Ashtabula, Ohio, all waste analysis conducted for the Eaton Avenue facility is typically conducted on-site. However, Detrex maintains a contract with an outside laboratory (RTI) to also conduct selected analyses.

Response II.C.9.

Some of the analytical test methods followed by Detrex Corporation are modifications of approved U.S.EPA Methods (ie. SW-846). Utilizing test methods developed for groundwater or drinking water analyses is not appropriate for the percentage level solvent contents of the F001 and F002 wastes received by Detrex Corporation.

Response II.C.11:

A copy of chain-of-custody document is provided. This form will be utilized at any time in which wastes samples are shipped off-site for analyses. The sample label and laboratory log book (on-site lab) are sufficient for tracking for analyses conducted on-site.

Response II.C.12:

The QA/QC procedures described in the Waste Analysis Plan, including the QAPP, are considered adequate for documenting the reliablity of waste analysis. SW-846 procedures were developed for detecting absolute trace (ie. ppm or ppb) levels of contaminants, this is completely inappropriate to the concentrated waste sampling and analysis conducted by Detex.

Response II.C.13:

Detrex salesmen generally visit customers on a very regular basis. At each visit, far more often than annually, any changes in the waste generation process are discussed and the possible impact on waste acceptability assessed. If appropriate, the waste would be re-characterized.

Detrex has also adopted a policy of re-characterizing each customers waste on an annual basis. This procedure has been documented in the revised Waste Analysis Plan.

Response II.C.14:

As referenced in Respone II.C.7., the generator is required to provide a completed and certified Waste Profile Sheet. Detrex also routinely, at minimum annually, conducts a more thorough waste characterization screening to confirm the accuracy of the Waste Profile Sheet.

Detrex is now set up at the Eaton Avenue facility to conduct all waste screeing analyses on site. More detailed waste characterization is completed at an off-site laboratory. The off-site laboratory, following the Detrex Waste Analysis Plan may also conduct screening analysis as conditions require (ie. overload on-site or equipment maintenance).

Manifests are not signed until waste screening has been conducted and the waste approved for acceptance. Thus waste rejection, if necessary, will occur before a manifest is signed.

Response II.C.15.

The waste characterizaiton/screening procedures were described in preceeding responses.

- a) copies of notification certificates from generators reviewed by Detrex are provided.
- b) the waste analysis form is presently being updated to reflect the new waste analysis procedures and the relocating of the Detrex lab from Ashtabula to the Eaton Avenue Facility.
- c) the solvent content is now recorded, however, the acceptence of the waste as being properly classified is not dependant on solvent content

- d) waste screening procedures have been described previously. Also, the waste analyses report is being updated. All appropriate revisions have been made to the Waste Analysis Plan
- e) The rejection procedure was described in Response II.C.7.
- f) A segreated area is maintained and will be indicated on a copy of the Facility Plan.

Response II.C.16.

It is completely inappropriate to analyze the type of concentrated wastes received by Detrex by standard approved methodologies that were developed for trace levels of chemicals at drinking water levels. The amount of dilution that would be required to quantify a percentage level solvent utilizing approved methods would essentially wash out any other chemical presence. Thus, the analytical methods developed by Detrex Corporation (a copy is provided in Attachment C-3 of the Application) are considered appropriate. Pursuant to your request, Detrex will submit a request under Act 64 Rule 215 for approval of the analytical methodologies developed by Detrex.

D. Section D - Process Description

Response II.D.1:

Information has been added, in accordance with the appropriate regulations, describing the two process feed tanks redesignated as hazardous waste storage tanks by the WMD. This information includes the inspection and record keeping procedures to ensure the two tanks are operated at or below their proposed process design capacity.

Response II.D.2:

- a) The "third" tank reported in the referenced tank certification is the 5,000 gallon generator accumulation tank utilized to store sill bottoms remaining after the distillation process. Although this tank is not a hazardous waste storage tank by definition, Detrex essentially operates the tank as if it were a hazardous waste storage tank. In the future, a correction will be made in all correspondence to properly reference the "third" tank (Tank No. 17) as a generator accumulation tank.
- b) The facility plan (Attachment D-1) references the tanks by number and location. The tank certification has been added to the Application.
- c) Tank number 23 was formerly utilized as a 1,500 gallon tank for accumulation of wastewater. The wastewater is presently discharged through an permitted discharge to a POTW. The tank was closed on May 3, 1991.
- d) The reference to a 1,400 gallon tank is actually the 1,500 gallon tank referenced above that has been closed.
- e) See responses c) and d) above.
- f) The engineer that provided the tank certification has been asked to submit a letter documenting the work that was conducted to correct the problems. The February 1991 tank certification which has been provided in Attachment D-6 certifies the tanks as adequate.
- g) The next annual tank assessment will incorporate the hazardous characteristics of the wastes in storage at WMD's request. This will include methylene chloride and the TCLP waste constituents.

- h) Detrex is continuing to try to obtain drawings of the existing tanks. The engineering certification and the certification of capability should be adequate to satisfy the WMD that the tanks are safely operated.
- i) Detrex will ensure that the next annual tank assessment is certified in accordance with 40 CFR § 270.11(d).

Response II.D.3:

The WMD is correct in stating that the incoming drums should already be provided with labels. However, upon receipt at Detrex, a new Detrex label is attached. A copy of this label was provided in the Application.

Response II.D.4:

The information on bulk shipment handling has been added.

Response II.D.5:

Agreed.

Response II.D.6:

The typo has been corrected.

Response II.D.7:

Liners are used in product drums containing fluoronated solvents. The liners are required for quality control reasons, not drum material protection. Even a minute quanity of water can cause discoloration in the fluoronated solvent product. The liner material prevents any moisture present within a steel drum wall from discoloring the solvent.

Response II.D.8:

The fluoronated wastes do not jeopardize the integrity of the steel drums. Although fluoronated wastes are corrosive to steel, the length of time that drums are in storage at the facility does not raise a concern of drum integrity. Furthermore, the inspection program will identify drums showing evidence of corrosion and remedial action will be taken.

Response II.D.9:

The container and tank storage design capacities have been clarified.

Response II.D.10:

A figure has been added illustrating maximum capacity drum arrangement. A minimum of two and one/half feet of aisle space is maintained between double rows of drums. Under normal operating conditions, (ie. less than maximum permitted capacity), the aisle spaces are wider. Only drums of the same specific type of waste (ie. Perchlorocthylene) are stored in the same row at any one time. The types of wastes in different rows varies due to the type of wastes being received and processed at a particular time.

Response II.D.11:

The hazardous waste drums will only be stacked a maximum of two layers high. The second layer is off-set of the base of the first layer for stability (i.e. the drums overlap rather than set directly on top of the bottom drum).

Response II.D.12:

Painted markings on the floor do designate the extent of the hazardous waste container storage area.

Response II.D.13:

The lower level of drums will either be placed on pallets (wooden or other material) or alternatively a double row of 2 x 4's with the drum straddeling the wood. Thus, the drums will be elevated off the floor.

Response II.D.14:

Any detected spilled material would be addressed immediately upon discovery. At maximum this time frame would extend from 5pm on a Friday to 8am on a Tuesday (i.e. long-weekend). The collected material would be characterized as F001 and/or F002 material based on the source of the spilled material.

Response II.D.15:

- a) all maps have been updated per a recent survey
- b) The Eaton Avenue building is old and actual 'as contructed' plans beyond what has been provided have not been located. The process equipment itself has also been in the facility for years without major problems. All equipment is adequately contained through secondary containment. A certification of registered professional engineer providing assurance of the capability of the facility to operate in compliance with all appropriate regulations has been included.
- c) Former storage practices are discussed.
- d) The only floor drain that exists is in the boiler corner. The drain referenced in the plan was never installed.
- e) The engineering plans provided are what is available. It is unreasonable to require an engineer to certify at this point that the building was constructed in accordance with the plans. The building has served Detrex since operations began with no evident problems. A certification of the facility's capability to operate in accordance with all appropriate rules and regulations is included as Section M of the Application. The certification is signed and sealed by a registered professional engineer.

Response II.D.16:

The sections have been deleted.

Response II.D.17:

The facility plan and list of process equipment have been updated. Also, a new process flow diagram has been developed.

Response II.D.18:

The estimation of secondary containment capacity has been re-done and certified. Adequate secondary containment is available.

Response II.D.19:

For the length of time that potentially spilled liquids may contact the concrete floor prior to clean-up, the concrete floor should be recognized as being adequately impermeable. Not withstanding this, Detrex will repair any cracks and gaps in the concrete, if any, and to provide a suitably compatible floor sealant.

Section E - Environmental Monitoring Program

Response II.E.1

See response I.B.

Response II.E.2

The expansion joint and crack sealing program described in Section E-2 has not been completed to date.

Response II.E.3

Appropriate revisions have been made describing Detrex's bulk waste handling procedures. (See Response II.B.4).

Response II.E.5

Conestoga-Rovers & Associates supervised the soil boring program on behalf of Detrex Corporation. An exprienced geologist conducted the field soil classification. Soil samples were classified in the field in accrodance with the Unified Soil Classification System (USCS). The grain size analysis for BH3 (35 ft. bgs) and BH2 (35ft. bgs) indicate 64% and 67% silt and clay size paricles, repsectively. Thus, according to the USCS, these samples are corrently classified as ML or CL. The CL classification was selected over ML based on the cohesive nature of the material.

Response II.E.6

A topographic map is provided.

Section F- Procedures to Prevent Hazards

Response II.F.1

See Response I.B.

Response II.F.2

Section F-2a has been re-written to provide a more detailed explanation of the general inspection program. The regular inspection program has been expanded to include the newly re-designated hazardous waste storage tanks.

Response II.F.3

All appropriate drawings have been revised to provide current conditions of the facility.

Response II.F.3

The inspection schedule provided in Attachment F-2 has been revised in accordance with the WMD comments. The inspection items are further described in revised Section F-2a.

Response II.F.5

Pertinent information regarding storage tanks has been provided.

Response II.F.6

The preventative procedures, structures and equipment associated with the management of bulk waste shipments have been provided.

Response II.F.7

See response II.F.3.

Section G - Contingency Plan

Response II.G.1

See Response I.B.

Response II.G.2

The facility description has been revised to reference the F001, F002 and D-series wastes handled by Detrex.

There are a total of 8 employees currently employed at the Eaton Avenue facility. At any single time one or two of the operators may be out picking wastes up or delivering product and the facility manager may be on a sales call. The secretary is always aware of exactly who is in the facility at a particular time by the sign-in/out sheet maintained in the office. This would include any vistors to the facility.

Response II.G.3

A copy of the material safety data sheets for any material handled at the facility will be attached to the Contingency Plan. A copy of each is always maintained on file in the office.

Response II.G.4

Table G-1 has been updated to reflect current personnel.

Response II.G.5

The reference to State EPA has been corrected to be identified as the MDNR on Table G-2.

Response II,G.6

Detrex recognizes a spill during a bulk shipment transfer operation as a potential major spill. The appropriate revisions have been made.

Response II.G.7

The command post location for an emergency situation would be the main office unless the emergency was such that a general evacuation is necessary.

The primary necessity of the command post is access to a telephone and access to a copy of the Contingency Plan.

Response II.G.8

Detrex recognizes that the safety of personnel is the paramount concern during an emergency situation. At any time during an emergency situation that the Emergency Coordinator, or his/her designated Alternate, determines a potential threat to the safety of personnel is present, appropriate action including activating alarms and communications systems or notifying appropriate authorities will be taken. A notation to this effect has been added to Section G-4.

Response II.G.9

The indicated section has been deleted from the Contingency Plan. The purpose of this section was to provide general guidance for the Emergency Coordinator in assessing the potential hazards of an emergency situation. Situation two was recognized as a hazard to the environment and possibly a hazard to human health.

Response II.G.10

In an evacuation situation, both the police and fire department would be notified by calling 911. The National Response Center is included under notification on Page G-10 and Table G-2.

Response II.G.11

Section G-4a provides the detailed notification, identification, assessment and reporting procedures to be followed by Detrex in the event of an emergency situation. Section G-4b provides immediate response actions in the event of a particular emergency. The other appropriate authorities, in accordance with Section G-4a, would also be notified after the initial notification (ie. fire department) is made.

Response II.G.12

See Response II.G.11 (above).

Response II.G.13

The sections have been deleted.

Response II.G.14

The list of emergency equipment has been updated. Also, the description and capabilities of appropriate equipment have been added.

Response II.G.15

As discussed previously, all facility drawings have been updated. The general location of all materials is shown.

Response II.G.16

As discussed previously, all facility drawings have been updated.

Response II.G.17

Copies of current coordination agreements are maintained in the facilities operating record. Upon approval of the revised Contingency Plan, Detrex will provide copies to the appropriate authorities and coordination agreements requested. Copies of these agreements will be provided to WMD and maintained in the facility's operating record.

Response II.G.18

A facility drawing delineating evacuation routes has been added. The primary meeting location for employees is also shown.

Response II.G.19

As stipulated in the second last paragraph on page G-21, The Risk Management Group of Detrex Corporation is responsible for retaining on file (ie. operating record) all applicable information.

Section H - Personnel Training

Response II.H.1

A personnel list including job titles and the name of the current employee is provided.

Response II.H.2

In the development of job descriptions, a new job title for these combined functions was established (ie. Gold Shield Operator #1). These individuals are trained initially with annual refreshers on the contents of the Contingency Plan.

Response II.H.3

The job descriptions have been updated.

Response II.H.4

The operators conduct the regular inspections.

Response II.H.5

New job descriptions for all hazardous waste management positions have been developed.

Response II.H.6

Mr. Bill Moore, Detrex Corporation Manager, RCRA Section also acts as Corporate Training Director. The training manual presented in the Act 64 Operating License Application has been upgraded by Mr. Moore.

Section I - Closure and Post-Closure Plan

Response II.I.1.

The closure plan has been revised to incorporate appropriate information relating to the re-designated hazardous waste storage tanks and related equipment.

Response II.I.2.

A facility description has been added.

Response II.I.3.

The rule citation has been corrected.

Response II.I.4.

A listing of what will be provided in closure certification statements has been referenced. The certification language has also been referenced.

Response II.I.5.

The entire Application has been revised as required by WMD's re-designation of the hazardous waste storage tanks.

Response II.I.6.

Agreed

Response II.I.7.

Almost the entire concrete floor area within the building serves as secondary containment and will be cleaned under closure. Closure procedures have been revised in accordance with WMD's comments. The concrete floor will be scrubbed and then triple rinsed. Analysis of rinse water will confirm cleanup and provide characterization of the rinsate for ultimate disposal.

Response II.I.8.

Decontamination equipment will include a standard commercial steam cleaner, mops and/or wire brushes or other standard cleaning equipment.

Decontamination fluids would be collected by wet-vac or other suitable means. The means of actually collecting the liquid from the floor would be selected by the contractor hired to complete closure.

Response II.I.9.

All decontamination material generated would be characterized as F001 or F002 wastes based on Detex's recycling and storage actitivites. The material will be transferred to an off-site permitted TSD facility. This facility may be an incinertor or a facility permitted under the fuels program. Detrex reserves the right to select the actual facility based on permit status and disposal costs at the time of closure. For cost estimating, an off-site incinerator has been assumed.

Response II.I.10.

The confirmation sampling program has been revised in accordance with WMD's comments. The procedure was described in Response II.1.7

Analysis would be by US EPA approved test methods (SW-846) for the parameters identified as being stored within the facility.

Response II.I.11.

The sections have been deleted.

Response II.I.12.

All facility plans have been updated.

Response II.I.13.

See Response II.I.1.

Response II.I.14.

The closure cost has been re-estimated at current dollars for the facility. The cost is based on third party costs.

Response II.I.15.

Detrex is preparing the financial test documentation on the provided form.

Section J - Enviornmental Assessment

Response II.J.1.

See Response I.B.

Response II.J.2.

Tank storage and bulk shipments have been added to the failure mode assessment.

Response II.J.3.

As referenced previously, Detrex has designed a suitable secondary containment system for the loading/unloading area. After completion, this will serve to prevent potential discharge to soils.

Response II.J.4.

A discussion has been added to discuss the potential magnitude and nature of human exposure.

Section K - Manifesting, Recordkeeping and Reporting

A new section to the Application has been provided detailing these requirments. Copies of appropriate documents will be provided.

Section L - Location Standards, a Facility Design and Operating Standards.

A discussion has been added as a new Section to the Application.

Section M - Certification of Capability

A certification of operational capability has been provided by a registered professional engineer.

Section N - Environmental Permits

Correspondence is attached regarding Detrex's on-going attempts to satisfy the permit requirements of the Fire Marshall Division and the Wayne County Public Health Department, Air Pollution Control Division.

Section O - Compliance Schedule

The program to provide secondary containment of the outdoor concrete loading/unloading area has been reviewed with the WMD and is presently being completed.

Detrex has recently applied a floor sealant to its Tranfer Facility in Arlington, Texas and is preparing to apply the same sealant to its TSD facility in Indianapolis in the near future. Due to the significant expense involved in prepared the concrete floor and placing the sealant compound, Detrex requests an opportunity to evaluate the performance of the sealant under normal Detrex operations (ie. at the Indianapolis facility). Detrex proposes to evaluate the Indianapolis program for a period of six months before completing a similar program at the Eaton Avenue facility.

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION THOMAS J ANDERSON MARLENE J FLUHARTY KERRY KAMMER O STEWART MYERS DAVID D OLSON RAYMOND POUPORE



JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING BOX 30028 LANSING, MI 48909

GORDON E GUYER, Director

February 26, 1988

CERTIFIED MAIL

Mr. Will Robrecht
Detrex Chemical Industries, Inc.
P.O. Box 501
Detroit. Michigan 48232

Dear Mr. Robrecht:

SUBJECT: Detrex Chemical Industries, Inc.

Act 64 Operating License Application

MID 091 605 972

In 1984, the Federal Resource Conservation and Recovery Act (RCRA) was amended by the Hazardous and Solid Waste Amendments (HSWA) to require a final decision on all permit applications for hazardous waste storage facilities by November 8, 1992. In order to meet the HSWA permit issuance deadline, the Michigan Department of Natural Resources is hereby formally calling in the Act 64 (1979 PA 64, as amended) operating license application for your hazardous waste treatment and storage facility located at 12886 Eaton Avenue in Detroit, Michigan. This call-in is being made pursuant to MAC R 299.9502. As specified in R 299.9502(3)(b), an owner or operator of a storage facility must submit a complete operating license application within 120 days of being requested to do so. As an agent for the U.S. Environmental Protection Agency, the Department is also calling in the HSWA portion of your permit application pursuant to Section 3004(u) of RCRA. The operating license will have a federally issued portion and a state issued portion. This dual permitting results because Michigan has not yet received final authorization for all portions of HSWA.

If you do not intend to continue to operate the facility, you may submit a closure plan in lieu of the requested operating license application. The closure plan must meet the requirements of 40 CFR 264 Subpart G, in accordance with and as adopted by reference in R 299.9601(3) and (8). If you desire to pursue this option, you must submit a complete closure plan no later than June 28, 1988.

The following comments will assist you in satisfying this request:

1. If you intend to submit an operating license application, an application form and a detailed instruction package are enclosed for your use. Instructions for preparing a closure plan may be obtained by calling the Hazardous Waste Permits Unit at 517-373-2730.

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Mr. Robrecht Page 2 February 26, 1988

Portions of the application will be extracted and made enforceable provisions of your license. As such, they must be submitted as complete, free standing documents to allow easy attachment to the license. Each item should be precisely written with specific schedules and commitments. Generalities and discretionary language should be avoided whenever possible. The following items are the primary attachments to the Act 64 license:

- a. Waste analysis plan;
- b. Inspection schedule;
- Personnel training program;
- d. Contingency plan;
- e. Closure and post-closure plan (including cost estimates);
- f. Facility plans and specifications;
- g. Procedures for all environmental monitoring carried out at the facility.
- 2. If applicable, the operating license application must include a corrective action program to achieve compliance with Section 3004(u) of RCRA. The RCRA portion of a hazardous waste permit (that portion addressing HSWA requirements) cannot be issued until the requirements of Section 3004(u) are met. Section 3004(u) requires "corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit under this subtitle." The provisions of HSWA require that decisions on permit applications be made on a rigid time schedule.

Please submit ten copies of your Act 64 operating license application by June 28, 1988. If you desire to close the facility in lieu of obtaining a permit, please submit a complete closure plan by the date specified previously. The Department recommends that you contact the Hazardous Waste Permits Unit as soon as possible to discuss the requirements outlined in this letter. Failure to submit the requested information within the time period indicated may result in the denial of your applications under Act 64 and RCRA.

Information obtained by the Department through an operating license application is routinely treated as a public record, as provided in the Freedom of Information Act, 1976 PA 442. A record, permit application, or other information, or a portion of a record, permit application, or other information furnished to or obtained by the Department or its agents under Act 64, may be designated confidential, for use only by the Department. If this option is pursued, however, detailed justification for the confidentiality request must be submitted with the Act 64 application. Please submit all confidential material in a sealed envelope marked "confidential material enclosed" and indicate same in your transmittal letter.

Mr. Robrecht Page 3 February 26, 1988

If you have questions, please contact the Hazardous Waste Permits Unit, Waste Management Division, at 517-373-2730.

Gordon E. Guyer

Director 517-373-2329

cc: Ms. Marilyn Sabadaszka, U.S. EPA

Mr. Richard Traub, U.S. EPA

Mr. Alan Howard, DNR

Mr. John Bohunsky, DNR/District DNR

Mr. Ken Burda, DNR/Operating License File

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION THOMAS J ANDERSON MARLENE J FLUHARTY GORDON E GUYER KERRY KAMMER ELLWOOD A MATTSON O STEWART MYERS

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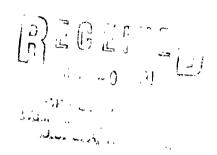
DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING
PO BOX 30028
LANSING. MI 48909 Delbert Rector, Director

-DAVID F-HALEST Director

May 15, 1991

Mr. Bill Moore, Jr., Corporate Manager Environmental Compliance, RCRA Section Detrex Corporation P.O. Box 5111 Southfield, Michigan 48086-5111



Dear Mr. Moore:

SUBJECT: Extension Request for Revised Act 64

Operating License Application

Detrex Corporation, MID 091 605 972

This letter is in response to your May 9, 1991, letter regarding the above referenced facility's Act 64 operating license application. The subject letter outlined the format Detrex Corporation (Detrex) wishes to use in responding to the Notice of Deficiency issued by the Waste Management Division (WMD) on March 26, 1991, in conjunction with a technical review of the application. According to the letter, Detrex intends to prepare a response for each of the deficiencies and submit the responses along with selected revised sections of the application to the WMD by May 24, 1991, with the remaining revised sections of the applications to be submitted at a later date.

The WMD hereby approves Detrex's request to submit a specific response for each of the deficiencies and along with selected revised sections of the application by May 24, 1991. A meeting to discuss the responses and the revised sections may be arranged at your request. Detrex is advised, however, that the entire revised application must be submitted by June 24, 1991.

Failure to adhere to this deadline and to submit a technically adequate operating license application is grounds for denial of the application pursuant to R 299.9518(2)(c) and for termination of interim status pursuant to 40 CFR §270.10(e)(5), and may subject Detrex to fines and penalties pursuant to Section 48 of 1979 P.A. 64, as amended.

If you have any questions, please contact Ms. Ronda L. Hall, Hazardous Waste Permits Section, Waste Management Division, Department of Natural Resources, P.O. Box 30241, Lansing, Michigan 48909, at telephone number 517-373-9548.

Sincerely,

Mindy Koch, Acting Chief Waste Management Division

517-373-9523

cc: Ms Lorraine Kosik, U.S. EPA

Mr. Rich Traub, U.S. EPA

Mr. Steve Buda, DNR

Ms. Ronda L. Hall, DNR

Ms. Nadine Romero, DNR

Mr. Don Mbamah, DNR-Livonia

Operating License File

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Shari Sicker/HRP-8J A51 779 Receipt for **Certified Mail** No Insurance Coverage Provided Do not use for International Mail UNITED STATES (See Reverse) Sent to Shamiye Street and No. D. Box 511 Postage Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing PS Form **3800**, JUNE 1991 to Whom & Date Delivered Return Receipt St Date, and Adds TOTAL Posta & Fees Postmark of Dat

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- 4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse RESTRICTED DELIVERY on the front of the article.
- 5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
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 - address of the article, date, detach and retain the receipt, and mail the article.

 3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article RETURN RECEIPT
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SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, and 4a & b. Print your name and address on the reverse of this form so the return this card to you. Attach this form to the front of the mailpiace, or on the back does not permit. Write "Return Receipt Requested" on the mailpiace below the art. The Return Receipt will show to whom the article was delivered adelivered.	if space 1. Addressee's Address
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N.S. Environmental Protection Agency

Michigan Section (HRPS)

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Chicago, IL. 60604

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ATTENTION: Shari Sutker

STATE OF MICHIGAN TRANSMITTAL

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FOR ACTION AS INDICATED
SIGNATURE REPLY-MY SIGNATURE NOTE AND FORWARD APPROVAL REPLY-COPY TO ME NOTE AND FILE ACTION PLEASE SUMMARIZE NOTE AND RETURN COMMENTS PLEASE INVESTIGATE PLEASE PHONE ME TNFORMATION FORWARDED PER REQUEST PLEASE SEE ME
REMARKS: Updates to Detrex Corp's (Detroit) application for your files.
FROM Blayer 1/18/00
FORM/10575

